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ABSTRACT

A study examined factors and problems that tend to hinder effective implementation of agriculture curriculum in Uganda's secondary schools. Comparisons of examination results revealed that the levels of achievement of secondary school students in agriculture fell below those of other science subjects. A survey was conducted in 10 schools where questionnaires were submitted to the headmasters, the agriculture teachers, and students of agriculture. Opinions were sought on teaching materials and facilities, teacher attitudes and training, school administration, the agriculture curriculum, and the examination system. Analysis of findings indicated that teaching materials and facilities were inadequate, and in some cases not available. Teachers were trained and competent but mobile; there were not enough teachers; and many were inexperienced. It was also found that administrators did not provide enough guidance and advice to teachers. The curriculum was found to be too broad to be covered sufficiently in the allocated time. Examinations were considered difficult due to the fact that teaching could not be accomplished properly because of lack of materials and facilities. Recommendations are offered for improvements. The survey questionnaires are appended, and findings are presented in tabular form. (JD)

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Sylvester N. Dioh

No. 41

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WILSON AMODOI:

AN EXAMINATION OF FACTORS RELATING TO THE EFFECTIVE IMPLEMENTATION OF AGRICULTURE CURRICULUM IN SECONDARY SCHOOLS IN UGANDA

1981/82

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AN EXAMINATION OF FACTORS RELATING TO THE EFFECTIVE IMPLEMENTATION OF AGRICULTURE CURRICULUM IN SECONDARY SCHOOLS IN UGANDA

BY

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SUBMITED TO THE FACULTY OF EDUCATION OF THE UNIVERSITY OF NAIROBI IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE POSTGRADUATE DIPLOMA IN CURRICULUM DEVELOPMENT

UNIVERSITY OF NAIROBI

1981/82

PREFACE & ACKNOWLEDGEMENTS

The practice of agriculture is perhaps as old as man has been on earth. It's importance and benefits need not be over emphasised. Agriculture is a dynamic practice which requires an understanding of its basic principals if any appreciable benefits have to be achieved. This fact has been realised the world over. Therefore agriculture has been given a prominent place in the educational programmes of many countries in the world. It is therefore no surprise or secret that agriculture is taking up a frontline position in the school curricula in Uganda also, particularly in Secondary schools. But the instruction in agriculture in these schools does not seem to be effective as shown by the relatively poor examination results. The purpose of this survey was therefore to find out why that is so.

In carrying out this survey, assistance and co-operation was offered by various persons. I therefore wish to convey my thanks and gratitude to the following: Mr. S.N. Dioh of the African Curriculum Organisation, K.I.E., Nairobi and Dr. C.F. Odaet of the Faculty of Education, Makerere University for the valuable professional guidance and supervision they offered and generally for their spirit of dedication to work; the people who helped in delivering and administering the research instruments; also to those who filled the questionnaires; the N.T.C. Kyambogo administration for allowing me time to carry out this research. The same thanks go to colleagues at N.T.C. Kyambogo, and in particular, Mr. W.F. Epigii, for their constructive suggestions; the Uganda National Examination Board (UNEB) for allowing me access to their records; my wife, Mrs. G.R. Amodoi, for her assistance in recording some of the responses from questionnaires; Mr. Ben R.O. Ekoot for assisting in getting the questionnaires typed; and last but not least, the person who typed the completed work.

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CHAPTER ONE

PROBLEM ANALYSIS

1. Background

Uganda is basically an agricultural country. Agriculture is therefore both the backbone of Uganda's economy as well as a source of living for the people. About 90% of Uganda's population is engaged in susbsistance agriculture in rural areas, often using the rural peasantry conventional methods of agricultural production.

The population growth rate of Uganda is about 2.5% per annum. In 1959, Uganda's population was 8.5 million. In 1969, it was about 10 million, and according to the 1980 census results, the population was about 12 million people. This rapid expansion of the population calls for increased food production. This can be achieved, other factors being favourable, by the use of better and improved appropriate techniques of agricultural production for more efficient exploitation of land. To achieve success in this, even the agricultural communities need literacy and education in agricultural techniques.

Education was becoming increasingly popular, especially in the 1960's. The masses saw the value of education as a key to success. Those who had it, found themselves in prestigious white collar jobs. This created the desire in the parents to send their children to school. But the rapid increase in the population also meant that there was a corresponding increase of the number of school age children for both primary and secondary school education. For example in 1960, the primary school age children were 1,276,000, while the enrolment was only 384,000. The secondary school enrolment in the same year was 6457 students. Later in 1966, the primary age population and enrolment were 1,501,000 and 642,000 respectively.

Also the secondary school enrolments had reached 20,003 students in only government aided secondary schools.

While this population increase was occuring, Uganda got her political independence in 1962. This ushered in a new problem. Independence meant that the jobs and posts which were held by whites and non-Ugandans in general, had to fall vacant because most of them had to leave their jobs. The government therefore realized that there was a need to educate and train manpower to fill up these jobs in government, civil service and parastatal bodies.

Previously however, in the 1961 Addis Ababa Conference on Education, African countries, Uganda inclusive, had resolved, among other things, to raise the enrolments in primary and secondary levels of education, with an ultimate goal of achieving universal primary education. Uganda however, did not have enough schools to meet all these demands. By 1962, there were only 42 government aided secondary schools and primary schools. The government was however more keen in expanding secondary school education so as to absorb the increasing number of primary school leavers. Consequent upon this policy by 1965, the government had established 25 more secondary schools. This helped to increase secondary schools and contributed to providing additional places. The table below shows changes in secondary school enrolments from 1960 to 1970 in government aided schools also.

TABLE I: INCREASES IN THE NUMBER OF GOVERNMENT AIDED SECONDARY SCHOOLS AND ENROLMENTS FROM 1960-1970

YEAR	NO. OF SCHOOLS	ABSOLUTE INCREASES OVER PREVIOUS YEAR	ENROLMENTS	INCREASES OVER PREVIOUS YEAR
1960	29	0	6,457	0
1961	31	2	6,699	242
1962	35	4	-	-
1963	41	6	9,542	-
1964	41	0	11,709	2,167
1965	66	25	16,192	4,483
1966	68	2	20,003	3,811
1967	71	3	25,180	5,177
1968	72	1	30,026	4,8
1969	72	0	33,453	3
1970	73	1	37,377	

Source: Education Statistics and Annual Reports: Min Education, Kampala.

Educational Expansion Versus Job Opportunities

The expansion of secondary school education however, brought about an influx of secondary school leavers who then had no where to go for further education and there were not enough available jobs to absorb them. The traditional education system inherited from the colonial past focused on training white collar workers. Thus this expansion of secondary education system, based on the structure of colonial curriculum and without a corresponding creation of job opportunities for the school leavers, created a situation whereby many school leavers remained jobless. This was so because the education they received did not prepare them to fit in the society and also did not prepare them for the relevant national needs. This crisis in employment opportunities was therefore a result of a mismatch between an educational strategy aiming mainly at qualitative expansion of academic streams and an economic system which was founded on the expansion of the modern sector which could not absorb most of the academically trained people searching for jobs.

The Quest

This advent of job crisis therefore gave the government a challenge to start a quest for changes in the educational system that would provide a better link between education and the world of work. The government therefore introduced measures into the secondary school system which were aimed at changing the attitude of students from that of job-seekers to jobmakers. Agriculture and other practical subjects were the target for achieving that aspiration. Agriculture however, had been in the school curriculum during the missionary colonial days.

There were farm schools for primary school leavers. It was also taught in primary and secondary schools. In the long run however, agriculture slowly went to the background for several reasons. First, a white collar job worker was more progressive than a farmer and so parents encouraged their children to aspire for white collar jobs. Also in schools-wrong doers were given to work in the school gardens and so, pupils began to look at cultivating as unworthy exercise meant for wrong-doers and for those who had not gone to school and also for academic failures in schools. Agriculture was also not examinable. In the post-independence period therefore, the government started to get involved in trying to re-introduce and give agricultural education a place of pride and prominence in the curriculum of secondary schools. Thus in the Third Five Year Development Plan (1971 - 76) the government for instance outlined the following emphasis:

"The major emphasis in the secondary education during the plan will be upon improving the quality and content of instruction .... At the E.A.C.E* level, the content of course is now being changed to make it more practically oriented. One or more of agriculture, commerce ..... will be offered at the E.A.C.E. course at secondary schools by the end of the Plan."

The role of the education authorities was therefore to try and organise schools so that the schools would carry out effective instruction in the subject. The basic purpose of the schools was to impart basic, relevant and practical skills in agriculture to students, with the hope that those who found themselves unable to proceed with education or those to whom this level of education was terminal, would use this knowledge and skills on the land to try and earn a living for themselves as well as

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*E.A.C.E. - stand for: East African Certificate of Education

trying to assist the rural people they came into contact with to improve their standars of living. So in 1970 agriculture was introduced into secondary school curriculum with the following objectives:-

i. To Stimulate an interest and create an awareness of the existing problems and opportunities in agriculture and rural development
ii. To demonstrate that farming is a respected occupation that is both profitable and honourable
iii. To develop self-reliance, resourcefulness, problem solving ability, scientific method and self-education
iv. To teach in a practical manner basic principles and skills in agriculture
v. To relate in broad terms, the value of agriculture to the family and the community in general and to show how improved agriculture will contribute to the world-wide campaign of freedom from hunger.
vi. To Provide a background for advanced studies in agriculture
vii. To ensure that schools take an active part in rural development by intergration of agricultural activities in the school curriculum.

However, the subject was not introduced to all the secondary schools at ago but only those secondary schools that met certain basic conditions for the teaching of agriculture were allowed to start teaching the subject. One of the basic conditions is that a school should have a piece of land for a school farm and students plots. In relation to other subjects taught in secondary schools, agriculture was optional but examinable. Since then, the number of schools and students offering agriculture has increased. The table below shows the

progressive increase in the number of students that sat for "O" level agriculture examinations in the respective years.

Table II: The Number of Secondary Schools that offered Agriculture and the Number of Candidates that sat for Agriculture "O" Level Exams in the respective years

YEAR OF STARTING	YEAR OF SITTING	NUMBER OF SCHOOLS	INCREASE OVER PREVIOUS YEAR	NUMBER OF CANDIDATES
1971	1974	17	0	1377
1972	1975	22	5	1562
1973	1976	24	2	1807
1974	1977	31	7	2565
1975	1978	41	10	3398
1976	1979	56	15	4217
1977	1980	65	9	3918

Source of Data: Uganda National Examination Board Annual Records

2. The Problem

Since the teaching of agriculture was started, the "O" level examination results in agriculture have generally remained low. In most cases, when agriculture results are compared with those of other science subjects, agriculture is found to be below those subjects. Tables III to IX below show the comparative performance of candidates from seven schools in agriculture, Bilogy and physical science or Physics with Chemistry for the years 1974, 1975, 1976, 1977 and 1978. Each table represents one school.

NB: In the tables:

D1, D2,	-	mean "Distinctions 1, 2" respectively
C3 to C6	-	mean "Credits 3, 4, 5 6" "
P7, P8,	-	mean "Pass 7, 8" "
F9	-	means "Fail"

*The figures appearing above each subject on each of the tables is the number of candidates who sat for the respective subjects in the given year.
In "%" column, the number of candidates who got respective grades in the given subjects is expressed as a percentage of those who sat for subject in the given year.

Table III Comparative Performance of Candidates in School I

(School I)

	1974						1975						1976						1977						1978					
	Agric 132*	%	Biol 144	%	Phy./Che 138	%	Agric 127	%	Biol. 146	%	Phy./Chem 143	%	Agric 140	%	Biol 168	%	Phy/Chem 131	%	Agric 155	%	Biol 166	%	Phy/chem 143	%	Agric 202	%	Biol 304	%	Phy/chem 176	%
GRADE																														
D1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	2	1	1	1	1	1	4	2	3	2	4	2
C3	6	5	4	3	9	6	3	2	1	1	6	4	9	6	5	3	8	6	8	5	3	2	7	5	15	7	8	3	9	5
C4	5	3	5	4	7	4	4	3	1	1	5	3	8	6	4	3	6	5	8	5	5	2	7	5	16	8	3	2	7	4
C5	5	3	5	4	5	3	2	2	5	3	3	2	10	7	11	7	6	5	13	8	6	4	3	2	18	9	9	4	9	5
C6	30	23	15	10	53	37	26	21	24	17	17	12	28	20	20	14	16	12	22	13	14	8	14	10	54	17	20	10	18	10
P7	30	23	23	16	19	12	34	28	31	21	23	16	25	18	30	20	17	13	41	24	35	21	22	15	32	16	49	24	20	12
P8	30	23	36	25	15	9	22	17	35	23	24	17	22	16	24	16	23	18	25	15	35	21	19	13	29	14	41	20	27	15
E2	26	20	41	29	14	27	34	27	41	34	64	42	37	26	54	36	55	41	49	29	67	41	70	49	54	27	71	35	82	47

Source of raw data Uganda National Examination Board records

Source

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Int. Yr. V Comparative Performance of Candidates in School V . .

	1974						1975						1976						1977						1978					
	Agric 46	%	Biol 97	%	Phy/Chem 98	%	Agric 36	%	Biol 105	%	Phy/Chem 105	%	Agric 38	%	Biol 121	%	Phy/Chem 110	%	Agric 85	%	Biol 84	%	Phy/Chem 75	%	Agric 63	%	Biol 114	%	Phy/Chem 96	%
GRADE																														
D1	1	2	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	4	0	0	1	1	0	0
D2	0	0	1	1	4	4	0	0	3	3	1	1	0	0	3	2	2	2	3	4	1	1	1	1	0	0	1	1	0	0
C3	3	7	8	8	13	13	2	6	14	13	10	10	2	4	14	12	12	10	8	9	11	13	8	11	3	4	12	11	16	17
C4	1	2	3	3	12	12	5	14	9	9	11	10	5	10	19	16	7	6	17	20	13	16	6	8	1	2	9	8	10	10
C5	6	13	8	8	7	7	10	28	15	14	13	12	1	2	11	9	4	3	14	16	15	18	6	8	5	7	14	12	7	7
C6	7	15	24	25	22	23	9	25	34	32	25	24	20	35	25	21	27	23	16	19	7	8	17	23	21	31	30	26	21	22
P7	13	28	17	18	12	12	7	19	20	19	15	14	16	31	25	21	24	21	20	24	18	21	16	21	19	28	29	25	17	18
P8	11	24	16	16	10	10	2	6	7	7	18	17	4	7	15	12	25	22	5	6	14	17	13	17	11	16	11	10	9	9
F9	4	9	20	20	9	9	1	2	3	3	12	12	4	8	9	7	16	13	2	2	3	4	5	7	8	12	7	6	14	15

Source of raw data Uganda National Examination Board records

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Comparative performance of Candidates in School III

Table F School III

	*1974				1975						1976						1977						1978					
	A&B	%	Bnk	%	Div/Unsat	%	Abs. 80	%	Bnk. 115	%	Div/Unsat 83	%	Abs. 87	%	Bnk. 95	%	Div/Unsat 50	%	Abs. 65	%	Bnk. 75	%	Div/Unsat 73	%	Abs. 89	%	Bnk. 112	%	Div/Unsat 101	%
GRADE																														
D1							0	0	1	1	4	5	0	0	4	4	2	2	1	2	7	9	8	11	1	1	3	3	9	9
D2							1	1	5	5	8	9	0	0	7	7	7	8	3	5	7	9	8	11	4	5	10	9	7	7
C3							26	32	23	22	24	27	14	16	27	27	31	33	28	43	32	42	23	32	29	33	35	31	26	26
C4							6	8	12	12	11	13	5	6	20	20	3	3	16	25	13	17	9	13	14	16	14	12	6	6
C5							8	10	9	9	13	15	17	19	10	10	8	9	5	7	9	12	6	8	19	22	20	18	18	18
C6							21	26	36	34	19	21	25	29	24	25	22	24	8	12	8	11	14	20	13	15	20	18	20	20
P7							9	8	11	10	5	5	15	17	5	5	9	10	3	4	0	0	3	4	6	7	10	9	11	21
P8							6	11	5	5	4	5	7	8	1	1	4	5	1	2	0	0	1	1	1	1	0	0	1	1
F9							3	4	2	2	0	0	4	5	1	1	1	1	0	0	0	0	0	0	0	0	0	0	2	2

Source of raw data: Uganda National Examination Board records

* 1974: Candidates had not yet sat.

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Table VI . Comparative Performance of Candidates in School IV

School IV

	Appic 65	%	Biol 110	%	Phy/chem 109	%	Appic. 71	%	Biol 93	%	Phy/chem 96	%	Appic 55	%	Biol 107	%	Phy/chem 107	%	Appic 95	%	Biol 107	%	Phy/chem 108	%	Appic 72	%	Biol 116	%	Phy/chem 115	%
GRADE																														
D1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	1
D2	0	0	0	0	1	1	0	0	2	2	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	3	3	1	1
C3	0	0	1	1	7	7	1	1	6	6	7	8	1	2	7	8	9	8	3	3	7	6	9	8	2	3	14	12	14	12
C4	0	0	4	4	7	7	1	1	9	10	9	10	0	0	12	11	3	3	5	5	14	13	9	4	4	6	5	4	7	6
C5	2	3	3	3	7	7	7	10	9	10	11	12	1	2	14	13	11	10	4	4	13	12	10	9	13	18	17	15	12	11
C6	10	15	20	18	20	19	22	31	30	32	18	20	12	23	34	32	22	21	17	18	30	28	22	20	15	21	34	29	21	18
P7	16	25	16	15	9	10	22	31	22	24	11	12	16	30	11	10	23	21	19	20	22	20	19	18	16	22	23	20	16	14
P8	20	31	16	14	20	19	9	13	11	12	2	14	15	28	20	19	20	19	25	27	12	11	20	19	12	16	12	10	21	18
F9	17	26	50	45	31	30	1	13	9	4	19	21	8	15	7	7	18	17	21	22	9	8	22	20	10	14	8	7	22	19

Source of raw data: Uganda National Examination Board records

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Table VII — Comparative Performance of Candidates in School V

School V

	1974						1975						1976						1977						1978					
	Aggic. 104	%	Biol 104	%	Phy/Chem 105	%	Aggic 110	%	Biol 110	%	Phy/Chem 110	%	Aggic 118	%	Biol 118	%	Phy/Chem 115	%	Aggic 107	%	Biol 108	%	Phy/Chem 77	%	Aggic 104	%	Biol 105	%	Phy/Chem 71	%
GRADE																														
D1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	0	0
D2	0	0	0	0	2	2	0	0	0	0	3	3	1	1	3	3	2	2	0	0	2	2	2	3	0	0	3	3	1	1
C3	0	0	2	2	11	11	10	9	10	9	9	8	7	6	20	17	14	12	1	1	25	23	12	16	2	2	14	13	8	11
C4	1	1	2	2	5	5	11	10	13	12	9	8	8	7	18	15	11	10	9	8	17	16	9	12	6	6	10	10	11	16
C5	0	0	5	5	9	9	13	12	4	4	10	9	15	13	15	13	9	8	10	9	6	5	8	11	16	15	13	12	9	13
C6	10	9	27	26	18	17	37	35	33	30	28	26	29	24	40	34	30	20	28	27	30	28	24	33	38	37	34	32	18	25
P7	30	29	24	23	15	14	24	22	20	18	20	18	27	23	17	14	14	16	25	23	18	16	11	15	23	22	24	23	16	23
P8	32	31	14	13	13	12	7	6	18	16	14	13	17	14	4	3	17	15	27	25	8	7	7	9	9	9	7	7	6	8
F9	31	30	30	29	32	30	6	6	12	11	17	15	14	12	1	1	11	9	7	7	1	1	1	1	10	9	0	0	2	3

Source of raw data: Uganda National Examination Board records

P913

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Table VIII — Comparative Performance of candidates in School VI

School: VI

	1974						1975						1976						1977						1978					
	Agric 71	%	Biol 106	%	Phy/Chem 106	%	Agric 34	%	Biol 103	%	Phy/Chem 105	%	Agric 97	%	Biol 121	%	Phy/Chem 99	%	Agric 99	%	Biol 114	%	Phy/Chem 93	%	Agric 69	%	Biol 108	%	Phy/Chem 84	%
GRADE																														
D1	0	0	0	0	1	1	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D2	0	0	0	0	3	3	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	4	4	0	0	0	0	1	1
C3	1	1	5	5	8	8	2	6	7	7	11	10	7	7	3	2	8	8	4	5	10	9	12	13	3	4	6	6	18	21
C4	1	1	6	5	10	9	0	0	6	6	5	5	4	4	6	5	5	5	7	9	3	3	8	9	8	12	3	3	8	10
C5	4	6	5	5	7	8	2	6	5	5	10	10	8	8	6	5	15	13	7	9	5	4	6	6	7	10	12	11	13	15
C6	7	10	8	17	26	25	11	32	22	21	24	23	28	29	20	17	26	26	21	26	24	21	15	16	15	22	23	21	21	25
P7	21	30	32	30	18	17	8	24	30	29	19	18	20	21	26	21	13	13	25	32	30	26	14	15	13	19	33	31	11	13
P8	22	31	19	18	17	16	8	8	17	17	17	16	12	12	30	25	19	19	7	9	21	18	21	23	10	14	21	19	9	10
F9	15	21	21	20	14	13	9	29	15	15	15	14	17	18	27	24	15	15	7	9	20	18	13	14	13	19	10	9	4	5

Source of raw data: Uganda National Examination Board Records

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Comparative performance of Candidates in Science subjects in Uganda Certificate of Education Examinations

School (vii)

	1974						1975						1976						1977						1978					
	Agric 79	%	Biol 95	%	Physics 96	%	Agric 88	%	Biol 95	%	Physics 93	%	Agric 96	%	Biol 106	%	Physics 104	%	Agri 118	%	Biol 118	%	Physics 87	%	Agric 145	%	Biol 151	%	?	%
GRADE																														
D1	0	0	0	0	1	1	0	0	0	0	5	5	1	1	0	0	9	9	0	0	2	2	0	0	0	0	0	0	4	4
D2	0	0	1	1	8	8	0	0	1	1	4	4	0	0	0	0	6	6	1	1	5	4	8	10	4	3	4	3	4	4
C3	1	1	8	8	9	9	1	1	11	12	14	15	11	12	7	7	31	30	20	17	21	18	13	16	22	15	15	10	21	22
C4	4	5	17	18	7	7	1	1	6	6	13	14	9	9	9	8	11	11	8	7	8	7	7	9	12	8	8	5	15	15
C5	3	4	6	6	7	7	1	1	9	9	6	7	4	4	19	18	5	5	8	7	17	14	7	9	19	13	14	9	10	10
C6	25	32	20	21	14	15	26	30	22	23	15	16	28	29	33	31	11	11	24	20	26	22	17	21	33	23	39	26	20	21
P7	22	28	14	15	10	11	22	25	18	19	11	12	23	24	14	13	12	11	23	19	18	15	16	19	21	15	37	25	18	18
P8	13	16	17	18	19	20	21	24	14	15	7	10	13	14	18	17	6	5	20	17	15	13	9	11	12	8	17	11	5	5
F9	11	14	12	13	21	22	16	18	14	15	16	17	7	7	6	6	13	12	14	12	6	5	4	5	22	15	17	11	1	1

Source of raw data: Uganda National Examinations Board records

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Now, if credit four (4) is taken as the lower limit of good performance, the position of agriculture can be revealed by getting for each of the three subjects, the cumulative percentage of the candidates who passed at C4 and above in each school in the respective years. This is shown in Table X below:-

Table X: Cumulative Percentage of Candidates who passed at C4 and above for each subject in each year for each of the schools

	1974			1975			1976			1977			1978		
SUBJECT / SCHOOL	AGR.	BIOL.	P/C.	AGR.	BIOL.	P/C.	AGR.	BIOL.	P/C.	AGR.	BIOL.	P/C.	AGR.	BIOL.	P/C.
i	8	7	11	5	2	7	13	7	11	11	5	11	17	7	11
ii	11	12	39	20	24	21	14	30	18	33	32	24	6	21	27
iii	-	-	-	41	40	54	21	58	51	75	77	67	55	55	48
iv	0	5	15	2	18	21	2	19	12	9	21	14	9	19	20
v	1	4	18	19	21	19	14	35	26	9	42	31	8	26	28
vi	2	10	21	6	13	19	12	8	14	15	13	26	16	9	32
vii	6	27	25	2	19	38	22	15	56	25	31	35	26	18	45

Table X (a): Number of times each Subject was Higher, lowest, and middle as per table X above

	HIGHEST	LOWEST	MIDDLE
AGR.	3	19	12
BIOL.	10	11	13
P/C.	20	3	11

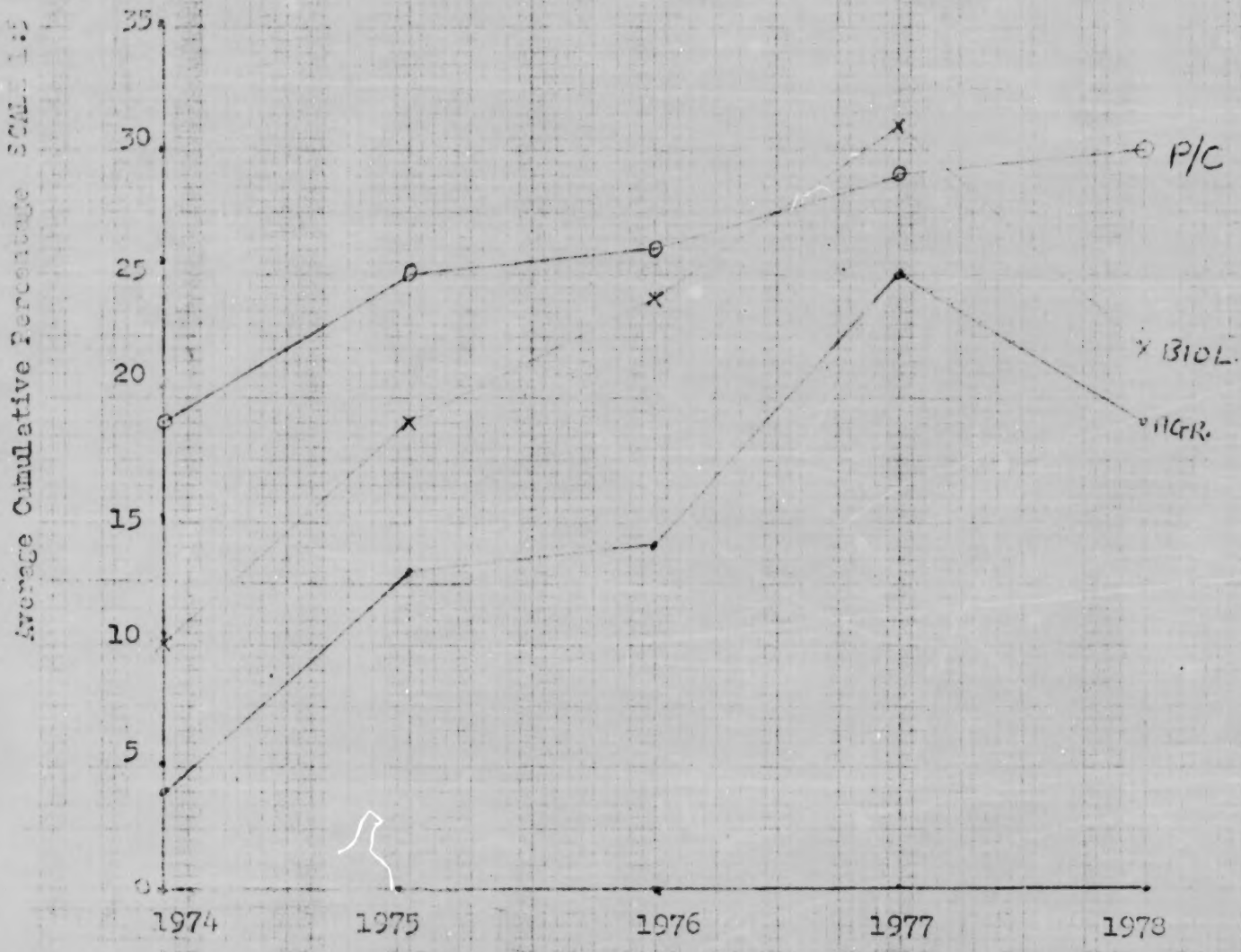
From table X (a) above, it can be seen that for the most number of times agriculture was the lowest and it was the highest for the least number of times. Now, from table X again if the average cumulative percentage for each subject in each year is calculated, table X (b) is obtained.

Table X (b): Subject Average Cumulative Percentages of Candidates who passed at C4 and above

YEAR	1974	1975	1976	1977	1978
AGR	4	13	14	25	19
BIOL	10	19	24	31	22
P/C.	19	25	26	29	30

Here also the performance of agriculture registers lowest at any one year. When a graph of these figures is drawn, figure 1 (fig.1) is obtained. The position of agriculture is clearly seen as being below the other two subjects.

FIG.1 Graph of Subject Average Cumulative Percetage of Candidates who passed in C/+ and above.



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Again, to be liberal, if credit six (c6) is taken as the lower limit of good performance, the data of table Xl below can be obtained by getting, for each of the three subjects, the cumulative percentages of candidates who passed at C6 and above in each school in the respective years.

Table Xl: Cumulative Percentages of candidates who passed at C6 and above for each subject in each year in each of the schools.

	1974			1975			1976			1977			1978		
SUBJECT / SCHOOL	AGR	BIOL	P/C	AGR	BIOL	P/C	AGR	BIOL	P/C	AGR	BIOL	P/C	AGR	BIOL	P/C
i	34	21	51	28	22	21	40	28	28	32	17	23	43	21	26
ii	39	45	69	73	70	57	54	60	44	68	58	55	44	59	58
iii	-	-	-	77	83	90	70	93	84	94	100	95	92	91	86
iv	18	26	41	43	60	53	27	64	43	31	61	43	48	63	49
v	10	35	44	66	55	54	51	52	60	45	76	75	60	70	66
vi	18	32	54	44	39	52	49	29	53	50	38	48	48	41	72
vii	42	54	47	33	51	61	55	64	72	52	67	65	62	53	76

Also in table XI above, each of the subjects appear for a total of 34 times and considering the above cumulative percentages of each subject and if count is taken to find out the number of times each of the subjects appears highest, lowest and middle, the information of the Table XI (a) below is obtained.

Table X(a): Number of times each Subject was Highest, lowest, and middle as per Table X above

	HIGHEST	LOWEST	MIDDLE
AGR.	3	19	12
BIOL.	10	11	13
P/C.	20	3	14

From table X1(a) above, it can seen that for the most number of times agriculture was the lowest and it was the highest for the least number of times.
Now, from Table X again if the average cululative percentage for each subject in each year is calculated, Table X(b) is obtained.

Table X(b): Subject Average cumulative Percentages of candidates who passed at C4 and above

YEAR	1974	1975	1976	1977	1978
AGR	4	13	14	25	19
BIOL	10	19	24	31	22
P/C.	19	25	26	29	30

Here also the performance of agriculture registers lowest at any one year. When a graph of these figures is drawn, figure 1 (fig.1) is obtained. The position of agriculture is clearly seen as being below the other two subjects.

Table XI(a) Number of times each subject was Highest, lowest and middle as per Table Xl above

	HIGHEST	LOWEST	MIDDLE
AGR.	9	19	6
BIOL.	12	8	13
P/C.	12	8	14

From table Xl(a) above, it can again be seen that even at credit six (C6) agriculture comes out as the lowest for the most number of times (19) and it was highest for the least number of times (9) as compared to the other subjects.

From Table Xl, if the average cumulative percentage for each subject in each year is also calculated, table XI(b) below is obtained.

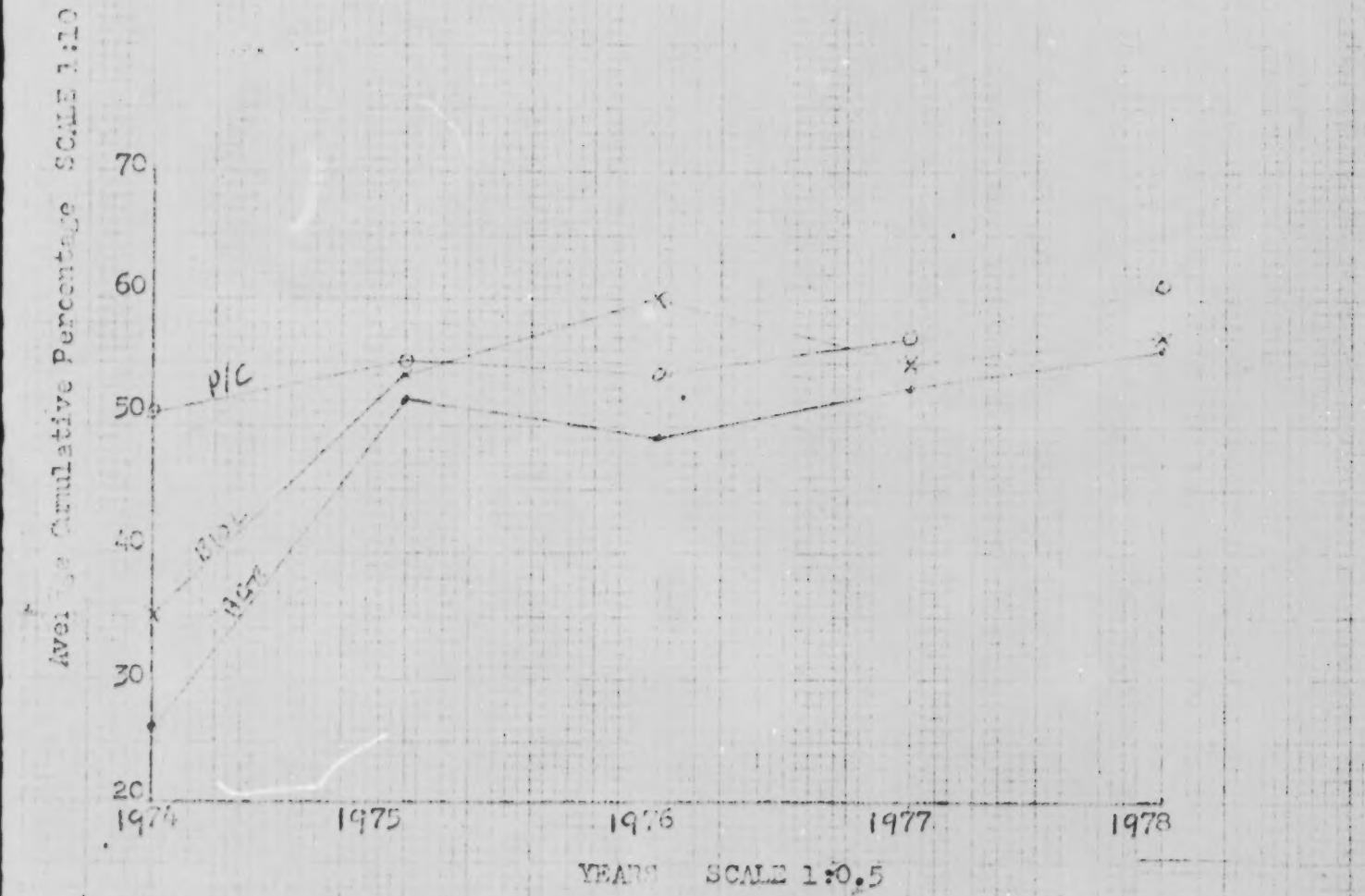
Table Xl(b): Subject average cumulative percentages of candidates who passed at C6 and above

YEAR	1974	1975	1976	1977	1978
AGR	26	52	49	53	56
BIOL	35	54	60	55	57
P/C	51	55	54	57	61

Again, here too, the performance of agriculture is seen to be lowest at any one year. When a graph of these figures is drawn Fig.2 is obtained. The position of agriculture is again clearly seen as being below the other two subjects.

FIG. 2

Subject Average Cumulative Percentage of Candidates who passed in C5



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The above analysis therefore indicates that students perform comparatively less satisfactorily in agriculture than in Biology and physical science or physics with chemistry.

Performance of candidates in the "O" level examinations has been taken here as an index of effectiveness of curriculum instruction or implementation.

Through casual observation, it would appear that the differences in the effectiveness of agriculture curriculum implementation among schools and within schools as reflected by examination results, is a consequence of several factors. Opinion not based on any systematic emperical studies or professional views seem to place the blame of the less satisfactory performance of students taking agriculture on the following factors:-

(a) The teachers of agriculture in respect to:
  i) their numerical numbers in a school;
  ii) quality of their training, and
  iii) their interest in the job

(b) The scope of the syllabus as compared to the available time. The syllabus is too overloaded in content for the time allocated to agriculture

(c) Materials and facilities for the teaching of the subject are not adequate and in certain cases not available

(d) Administrative and organisational atmosphere in some schools does not motivate the teachers to teach well or does not promote effective learning.

3. <u>The Purpose of Study</u>

Given this uncertainity about the causes of ineffective instruction of agriculture in Uganda Secondary Schools, the purpose of this is therefore to:

(a) Compile and compare the "O" level examination results in agriculture and other two science subjects in a number of schools over a period of 5 years with a view to determine precisely the rating of performance in agriculture in comparison with other two science subjects.

(b) Investigate and identify the factors that contribute to the low performance in agriculture as seen from the results and to suggest measures that may be taken in order to raise the qualitative index in agriculture students' performance in secondary schools.

4. Significance of the Study:

In the light of the factors considered, the study will:-

(a) Give a clue as to the relationship between the competences of teachers and their effectiveness in class. The information obtained may assist to indicate how the training of teachers for agriculture should be adjusted.

(b) Help to reveal which areas of the syllabus teachers find generally difficult to teach or to cover and why and also which areas students find difficult to understand. This information may -

(c) Assist the examining body to reach a compromise with schools on how the particular area(s) of the syllabus can be examined

(d) assist those in charge of teaching agriculture in secondary schools to device plans on how to make the instruction of such an area easier

(e) Help reveal the relationship between the administration and organisation in the schools and the effectiveness of agriculture instruction. This knowledge may be useful to the inspectorate and education supervisors in general.

5. Limitation of the Study

(a) Due to high transport costs and lack of transport and accessibility to some parts, it was not possible to visit schools in various corners of the country to get a more fair distribution and representation of ideas and views. The findings here in can therefore be generalised within the limits of this limitation.

(b) Due to the limited time of the study, the questionnaires could not be made exhaustive enough. This was to keep the number of items small so as to facilitate the handling of the data.

(c) Also due to the difficulty envisaged in handling large data manually, the sample of students from S4 in each of the schools visited was limited to one stream. This would be 40 students utmost. So since schools generally have 3 to 4 streams this could be regarded as a comparatively small proportion of the population.So conclusions made from the findings here-in, will be made with this point in mind.

(d) Item 9 on the S4 students questionnaire was not properly understood by the students. This was shown by the fact that the findings from item 9 were contradictory to those of item 8. Hence no logical relationship could be established.

6. Definition of Terms

(a) Effective Implementation:
In the context of this study, it means the passing of knowledge whether theoretical or practical in such a way that the learners will be able to understand it and do well in the final examinations

(b) Secondary School - In Uganda's education system this refers to the 8th upto the 11th year of formal education.

(c) Private Schools: These are schools which are run by either individuals or parents without financial or any other assistance directly from the the government.

(d) Government Schools: There are schools which are under the direct control of the government and receive financial and other assistance from the government.

(e) "O" level examinations: These are final examinations taken at the end of the fourth year of secondary school education. Formerly it was also referred to as "East African Certificate of Education - (E.A.C.E.)" but now it is "Uganda Certificate of Education (U.C.E.).

(f) E.A.C.E: Stands for "East African Certificate of Education" commonly referred to as "O" (Ordinary) level. It is now referred to Uganda Certificate of Education - U.C.E.

7. Literature Review

The main objective of the study was to find out whether the effective implementation of agriculture curriculum in Uganda Secondary schools is affected by such factors as the teachers, scope of the syllabus, teaching facilities and materials and school administration.

Standa, E.M. (1975, pg 143) states that the difference in feedback through the examinations at a quick glance shows that schools which have better resources like books and teachers, perform better than those which do not have similar facilities.

Also Sifuna, D. (1974 pg 215-221), in his discussion of factors that affect the quality of teaching in primary schools in Kenya, says that lack of facilities, inadequate teachers, quality of teachers and their experience in the field of teaching affect their effectiveness in the class-room. Although this is a case relating to primary schools in Kenya, it can also be true for secondary schools here and elsewhere and at all levels. So some of the factors affecting teaching in one place and at a given level can

also affect teaching in another place and other levels.

Regarding teachers, Heynemen, S.P. (1976, pg 41) had this to say:

"Each year in Uganda, disappointing Primary Leaving Examination results have given rise to efforts to attach the cause to the school teachers. In 1972 for example, the national press reported censures which administrative officials gave to teachers within their districts".

This points to the fact that a teacher is considered a very important tool in the production of good examination results.

While a teacher is recognised as a very important tool, there are several aspects that go into making a good grasp of the subject matter and methods of passing it on to the pupils. This will give him confidence in himself. To this effect, Castles E.B. (1966 pgs 75, 80) says that knowledge is not enough if we do not know how to pass it on to our pupils and that training is also not enough if we have no knowledge to pass on. He continues to say that a firm grasp of a few teaching methods that he (the teacher) has proved good will give him confidence. Highet, G (1951, pgs 11, 17) also in his discussion of qualities of a good teacher states that the first and most necessary thing of all is for the teacher to know the subject matter. He argues that while this sounds obvious, it is not always practised. From common knowledge, Highet's point is well substantiated by the fact that some of the popular teachers in schools are those who know what they are teaching.

Mastery of the subject matter and methodology cannot alone contribute to the teacher's effectiveness. It is also common knowledge that a job done without interest is usually performed less satisfactorily. Interest in the subject also

determines how well a teacher can teach his subject. Again Highet, G (1951, pg 14) has this to say on this point:

" ..... we ought, if we are teachers, to be so keen on our subjects that we talk interestingly about unusual aspects of them to young people..... Neglect of this principle is, one of the chief reasons for bad teaching that makes pupils hate schools and universities and run away from valuable fields of knowledge".

This view can be supported by even our own experiences as students. The most disliked period was that one by a dull and uninteresting teacher.

Further more, according to Highet, G (1951,pg14) another essential of good teaching is for a teacher to like his pupils or students. It is true that a friendly teacher wins the willingness of his/her students to learn. A harsh teacher will make students to be withdrawn and keep their problems within themselves.

However, with all the above attributes, a teacher often remains faced with other problems which tend to reduce his efficiency by acting on his morale. The low salaries of teachers comapred to their contemporaries in other professions, make the teachers feel cheated, hence to wonder why they should expend a lot of their energy for a low pay. Highet, G (1951,pg 9) also agrees that a teacher's chief difficulty is poverty. He or she belongs to a badly paid profession. He cannot dress and live like a workman but he is sometimes paid as little as an unskilled labourer.

It is also an obvious fact that the productivity of any enterprise depends on the quality of labour which it attracts and one major thing that leads in attracting the right quality of labour is good payment and conditions of service. Often teaching suffers from its inability to attract the more competent people because of the low pay. In other words, the qualitative aspect of teacher

supply is affected by the low pay rates of the teaching profession. On this point, Coombs, P.H. (1968, pg 35,38) argues that as the education enterprise continues to grow larger relative to the whole economy and as it retains its labour intensive character while competing enterprises become more capital intensive, it is progressively more difficult for education to match competitive salaries attractive to top flight personnel. In the degree to which it fails, it contributes to a downward trend of the teacher status. This increases the difficulty education has in attracting the right kind of people to improve education's quality and productivity. Therefore, Coombs adds, the future quality of teachers in any country will decisively be influenced by what happens to teacher salaries.

Elaborating on the same issue, Dioh, S.N. (unpublished, 1981 pg 97) in his discussion of teachers' welfare and professional growth, has brought out clearly the desperities between teachers and other working personnel. Citing an example from French-speaking countries, he says this:-

"..... But as university staff, the teachers have many fringe benefits to which teachers of secondary and primary sectors of educations are not entitled."
He continues to say:
"Based on the educational level at which they teach, University lecturers enjoy a high social and economic status than their counterparts in other sectors of education."
It shoud however be observed that this situation is not limited to French-speaking countries alone.

It is also not uncommon to hear politicians urging the teacher to do his work tirelessly and be a shining example of a good human being. On this, Dioh, S.N. (unpublished, 1981 pg 12) again argues that:

"If the teacher is realized to be such an important factor for manpower development, then efforts should be focussed on how the teacher's interests can be protected so that maximum output can be expected from him."

He adds that consideration of teachers should aim at giving the teachers status, social and material welfare.

Another factor that influences the effectiveness of teachers is the quality of training they receive. Good training produces good teachers and vice versa. Munyua, G, et al (1974, pg 55) say that the effectiveness of our education will depend also on the number and quality of teachers as on other provisions. Teachers must have sound and complete education before they are hired for teaching. Coombs (1968, pg 43) also commenting on the quality and numbers of teachers says:

"If there is to be an improvement in respect to quality as well as numbers, there must be an increase of input in teacher training colleges of first rate trainers and of good trainable human material."

While this is the ideal expectation, still the salary structure of teaching will also determine whether good trainable human material will come in or not.

On the same issue, a U.S.S.R. publication (1976,pg 27) also asserts that the quality of training depends on the quality of instruction which in turn depends on the qualification of the teaching staff at any level of teaching may also influence the effectiveness of the teacher. In short, an adequate number of well trained teachers with good qualification constitute an effective teaching force.

However, while the above is true, teachers cannot be expected to teach well without supplies or facilities, no matter how well qualified they are. Just as well trained personnel are important for success of school curricula, so are the equipment and supplies. Mbiti, D.M. (1974, pg 113) in his discussion says that curriculum design is void of practical meaning without things such as textbooks, visual aids and the like. Equipment and supplies for any given school

must first of all be up to date and in line with the current syllabus. They should also be adequate and available in time. Now, while the two points above represent the ideal situation about facilities and materials, it is common knowledge that in most schools, facilities are often not adequate and at times out-dated.

Also, in their discussion on facilities, Brown et al (1973, pg 4) say this:

"The learning environment affects the performance of teachers and students in many different ways. Fixed spaces, immovable furniture and walls for example often freeze teaching methods and curriculum goals in undesirable unsatisfactory ways."

Leadership in any group undertaking also influences the success of such undertaking. Leadership in schools is no exception. On this point Mbiti D.M. (1974, pg 111) says that an observable fact is that poor educational administration can limit or even wreck the most ambitious and progressive curriculum design. It is argued that the success of every school depends also on sound educational administration. Poor school administration for instance will create among teachers and students attitudes that don't promote effective teaching and learning.

Also, Kimbrough, R.B. et al (1976, pg 88) related the ideas of other education writers who emphasised the job of the school executive as determining what is to be done to carry out policy and how to do it, ensuring resources to do the job are provided as needed, and instructing the subordinate educators in the application of appropriate methods and materials. Kimbrough,R.B. et al (1976, pg 94) also cite Kimball Wiles version of 1950 in which Kimball Wiles gave suggestions that could be used by school leaders to promote staff harmony. These suggestions included being polite and courteous, being accessible, taking prompt action on request, letting people

know when they did a good job, being willing to listen, offering assistance in settling disagreements, giving credit where due, and being cheerful.

Continuing with Kimball Wiles' ideas, Kimbrough et al again cited Kimball's opinion that morale of an individual is affected by the amount of work done. He also submitted that teachers want security, a comfortable living, pleasant working conditions, a sense of belonging, fair treatment, a feeling of importance, a sense of achievement, a part in policy formulation and a situation in which they can maintain their self respect. He urgued that an effective school leader must give attention to these wants and constantly demonstrate that morale of teachers is one of his or her major concerns. Further more Kimbrough et al (1976, pg 95) cited the opinion that the school principals had a parental role in the school. He is to maintain the desirable relations and high morale among teachers. The principal should also give attention to the economic, and social aspects of teachers' life, moderate criticism, make judicious use of praise, be mindful of personalities and problems of teachers, and give advice conducive to the development of full potential growth.

Tron, K.E. (1970, pg 145) also in his discussion of leadership states that the achievement of an organisation may be measured in terms of the extent to which it fulfills its purposes or task, and the behaviour of an administrator is directed towards facilitation of that achievement.

Cooldstein J (1975, pg 135) from his research on the role of the principal in Israel, one of his findings was that the principal is percieved to be responsible for creating the educational atmosphere and for determining educational policy in school.

The above views regarding the leadership of a school are definitely important in the smooth running of any school, thus providing an atmosphere condusive for peaceful teaching and learning. One of the causes of school strikes has often been said to be poor school administration.

Given good teachers and adequate facilities, the succes of the job will still be influenced by the students. Studies in psychology reveal that individuals have differences.

Educational pyschology also has revealed that individuals differ in their intelligence and hence rate of understanding all other factors being equal. So the success of a teacher depends also on the inteligence of those he is teaching. A good teacher can produce no miracle if someone's ability to understand is low.

Therefore in summary, the effectiveness and success of the learning process are influenced by the school environment, the infrastructure, quality and quantity of instructional materials both soft and hard ware, the number of teachers motivation as influenced by their status and welfare; the quality of school administration (leadership), students' interest and motivation and their learning capabilities.

In the next chapter, an attempt will be made to give the method and the rationale for the sample population selection and also to give a description of the research instruments to be used in collecting data and information from the sample population.

CHAPTER TWO

DESIGN OF THE STUDY AND METHODOLOGY

1. Data Collecting Procedures

The type of research undertaken was a survey Research and was designed to examine factors relating to the effective implementation of Agriculture Curriculum in Uganda secondary schools.

The population that was used as subjects for data collection included headmasters of secondary schools offering agriculture, teachers of agriculture in those schools and the senior four (S4) students offering agriculture in those schools. The headmasters in the sample of schools taken were men except in one school where both the head and the deputy were women. All of them had varying amounts of experience as heads of secondary schools. There was also a variation in their academic backgrounds.

The headmasters of the schools sampled were considered as subjects for data collection because they are expected to be acquainted with the problems affecting the teaching of agriculture in their respective secondary schools. The teachers of agriculture in the sampled schools were also taken as subjects for data collection. The teachers consisted of both male and women teachers all with varying academic backgrounds, teacher qualifications and experience as teachers of agriculture in secondary schools. In terms of numbers and qualifications, there were more Grade V teachers and fewer graduate teachers. This difference came as a coincidence but not as a deliberate effort to vary the numbers. The basis for choosing the teachers of agriculture also for data collection is that they are the ones who are involved with the actual teaching or execution of the agriculture curriculum and so they are expected to have a better knowledge and experience of the problems relating

to the effective teaching of agriculture in secondary schools. The sample of the senior four (S4) students taking agriculture consisted of both boys and girls. The S4 students were included in the subject population because they have been exposed to the teaching of agriculture for four (4) years. Therefore, they were regarded as having a much fairer view and enlightened opinion of the subject matter content; the quality of instruction and other issues influencing the and efficiency of their learning.

2. Sampling Procedures

Up to 1980, there were about seventy five (75) secondary schools offering agriculture. Out of the 75 schools, ten (10) were chosen for this study. The choice of the ten schools was based on the following factors; The first one was transport. All the movements to collect the data was to be by public transport. Due to the high costs of transport, it was not possible to travel to many schools. Data collection was therefore limited to schools offering agriculture in those areas which could be reached with minumum expense. The research was also limited to the areas which were easily accessible by road transport. The third factor was the difficulty in getting or obtaining staionery. The cost of duplicating paper is generally high. Many schools would mean a lot of paper for duplicating the research instruments (questionnaires). The number of schools was therefore the number for which it was possible to afford the stationery. Time within which to complete the study was also limited. Many schools would have also meant a lot of data to handle. This would also require more time since the data was to be analysed by hand. The above factors therefore influenced the choice of the ten (10) schools. By coincidence, the ten schools fell into the following categories:

co-educational:	Boarding	3
Girls :	Boarding	1
Boys :	Boarding	3
Co-educational:	Day	2
Boys :	Day	1
		10

The distribution of the above ten schools by location was as follows:

Kampala	5;	4 rural, 1 urban
Jinja	1;	1 urban
Mbale	4;	2 rural, 2 urban
Total	10	

Below is the map of Uganda showing the distribution of the ten schools.

Figure 3: Map showing the locations of the ten schools

From each of the above ten schools, the headmaster, the teachers of agriculture, and the senior for (S4) students were used as subjects for data collection. The headmaster of each of the ten schools was supposed to fill a questionnaire but in his/her absence; the deputy headmaster would fill it. So ten filled questionnaires were expected from the headmasters. All the teachers of agriculture in each of the ten schools were also expected to fill the questionnaire. The total number of agriculture teachers who respondended was therefore seventeen (17).

Most secondary schools in Uganda have classes with 2-4 streams. For the S4 students, only one stream from each of the ten chosen schools was given questionnaires to fill. The streams were randomly selected. Since the number of students within streams and schools varies, the total number of the S4 students taking Agriculture who filled the questionnaires came to 292.

In summary, the numbers of the subjects sampled by category were as follows:

Headmasters	10
Agriculture Teachers	17
S4 Agriculture Students	292
Total	319

3. Description of the Research Instruments

As shown above, the total number of expected respondents from the ten schools was 319 comprising of the three groups given above. Questionnaires were used for collecting data from these three groups of subjects. The advantage of the questionnaires was that a larger number of the subjects could be covered in a shorter time as compared to personal interview method. A questionnaire was designed for each of the three groups. The instruments had multiple choice questions which were to be analysed by frequency counts. They also carried some open questions. Each of the three instruments carried questions designed to extract information on the problems relating to the

effective implementation of Agriculture in secondary

The items in each of the instruments were as follows:

(a) Headmasters' Instrument (Questionnaire)

This one carried eighteen (18) items all of which were of the multiple choice system except items 1 and 2. Items 1 and 2 sought to find out how long the school has been teaching Agriculture and the current number of Agriculture teachers in the school.

Items 3, 4, and 5 were on the teaching or instructional materials and facilities. Items 3 and 5 designed to find out the quality of teaching materials and facilities in schools and item 4, the suitability and relevance of the available materials and facilities; while items was to find the effect of the quantity, and suitability and relevance of the teaching materials on the performance of candidates in the "O" level Agriculture examinations.

tems 6 (a), 8, 9, Lo, 11, 12, 13, 14 and 15 were on teachers of Agriculture. Item 6 (a), was on the adequacy of teachers and items 8, 9, 10 on the competence of the teachers of agriculture and the courses of incompetence respectively. Item 11 sought to find out the level of morale of Agriculture teachers and item 12, the causes within the school, of the said level of morale. Item 13 was designed to find out the teaching load of the Agriculture teachers and item 14 was to find out the headmasters' opinion of the effect of such load on the efficiency of the teachers. Meanwhile item 15 was to find out whether there would be necessity for more teachers of Agriculture in secondary schools.

Item 6 (c) sought to find out whether assistance from Inspectorate has any effect on the teaching of Agriculture and the performance of candidates in Agriculture.

Item 6 (b) was aimed at finding out whether the content of syllabus also affects the teaching of Agriculture in

in secondary schools, while item 16 was to find out the relevance and suitability of the Agriculture Curriculum to the students' and the National needs.

On Agriculture examinations, item 7 was designed to find out whether performance of candidates in Agriculture was below, same as, or above that of the more established subjects. Item 17 sought to establish the opinion of the headmasters' on the level of difficulty of Agriculture examinations, and item 18 was to establish the effect of that level of difficulty on the performance of the candidates in Agriculture.

(b) Agriculture Teachers Questionnaire

This one consisted of sixteen (16) items all of which were of multiple choice type.

Items 9 (a) and 12 were on teaching materials and facilities. Item 9 (a) was to find out the teachers' view regarding the quantity of the teaching materials and facilities they are using. Item 12 was to determine the effect of that quantity of teaching materials and facilities on the performance of candidates in the "O" level Agriculture examinations.

Information about teachers of Agriculture was to be derived from items on 1 to 8, 16 and 17. Items 1 and 2 were on the qualifications and place of qualification of each teacher. Item 3 was to establish for how long each teacher had been a secondary school teacher. Item 4 sought to find out a reason why each of the teachers joined the teaching profession. Item 5 was meant to establish the level interest of teachers in teaching while item 6 was to find out the causes of low level of or lack of interest in teaching. Items 7 and 8 were to find out the level of confidence of the teachers and causes of lack of or low level of confidence. Item 16 was to find out how long each teacher had been to his current school. This eventually would give a picture about the stability or mobility of teachers.

Item 17 was designed to find out which classes each teacher was teaching and this was to be related to his qualification, experience and how long he had been to his current school.

Item 6 (b) was to find the quality of school administration.

Items 9 (c), 10, 11, 14 and 15 were designed to get responses about the Agriculture Curriculum. Item 9 (c) sought responses on whether the coverage of the Agriculture syllabus was good, average or poor, and item 10 sought reasons for the given degree of the syllabus coverage. While item 11 was on the effect of poor coverage of the syllabus on the candidates' performance.

Item 14 required the teachers' experience on whether the present number of hours given to Agriculture in schools is enough and item 15 required the teachers to suggest the number of hours they thought would be adequate in case the present number is inadequate.

Items 12 and 13 were aimed at finding out the effect of teaching materials and facilities, and school administration respectively, on teaching and candidates' performance in Agriculture.

(c) The S4 Agriculture Students' Questionnaire

This instrument carried seventeen (17) items. Part of item 3 is on teaching materials and facilities. It was designed to try and find out whether inadequacy of teaching/learning materials and facilities was responsible for the difficulty in understanding of certain subject areas in Agriculture by the students.

Items 1, 3, 4, 5, 10, 12, 13, 14, 15 and 16 required the students' views and information regarding the quality and duty conciousness of their teachers.

Item 8 and 9 were on school administration and were designed to tap the students' opinion of their school administration and the effect of such quality of school administration on teaching and candidates' performance.

Items 2, 3, 6 and 7 were aimed at extracting information with respect to Agriculture Curriculum.

Item 17 required the students' view on the level of difficulty of the "O" level Agriculture examinations; while item 11 was designed to find out the effect of the teachers' characteristics or personality on the interest of the students in the subject.

4. Administration of the Research Instruments:

In view of the cost and difficulty of transport, it was not possible to deliver the instruments to each school personally. The instruments were delivered to the schools by persons who were found to be going to the respecitve schools, and they were to be delivered to a teacher of Agriculture in the respective schools. The instruments were also accompanied by instructions on how the instruments were to be administered. From two of the schools, the questionnaires were returned by the same persons who delivered them. For the other schools, the filled questionnaires were collected personally.

The next chapter therefore deals with the computation and analysis of the data collected from the 3 population samples using these instruments.

C H A P T E R T H R E E:

DATA COMPUTATION AND ANALYSIS

I. Questionnaire Returns

The rates of questionnaires return from the sample populations are shown in Table XII below.

TABLE XII: Questionnaire Returns

SAMPLE POPULATIONS	SAMPLE SILES	QUESTIONNAIRE RETURNS	% RETURNS
Headmasters	10	5	50
Agric. Teachers	17	17	100
S4 Agric. Stud.	292	292	100
Totals	319	314	98%

* 98% is derived by expressing 314 as a percentage of 319.

TABLE III below shows the breakdown of questionnaire returns per school

TABLE XIII

SCHOOL CODE	S4 AGRIC. STUDENTS	AGRICUL. TEACHERS	HEADMASTERS
A	20	3	-
B	37	2	-
C	39	1	1
D	28	2	1
E	38	1	-
F	21	1	-
G	28	1	1
H	28	2	1
I	21	2	1
J	31	2	1
Totals	292	17	5

As shown in table XII above, the percentage responses or questionnaire returns from the sample population was

50% from headmasters
100% from agriculture teachers
100% from S4 agriculture students

So, the synthesis of figures and findings from the above sample populations is sound enough to base conclusions on because the total response rate was 98%. This approach of synthesis is taken because the questionnaires for the three subject (population sample) groups carried items that required information on the same issues.

II. Data Computation and Analysis

The concern of this study is to identify problems that have tended to hinder effective implementation of Agriculture Curriculum in secondary schools in Uganda. In constructing the research instruments therefore, the main areas that information was sought on were: teaching materials and facilities: teacher numbers; quality and other characteristics; quality of school administration; nature and content of Agriculture Curriculum; examination system and some aspects of students. The analysis of the data will therefore be undertaken with the view of the objective of the study in mind, and also within the context of these areas. The analysis of the data is in the order of headmasters' questionnaires first, followed by that for the agriculture teachers and then that of S4 agriculture students.

1. Headmasters' questionnaire

(a) Teaching Materials

From item 3 regarding the quantity of agriculture teaching materials and facilities, the response was as follows:

40% said teaching materials were adequate
60% said teaching materials were inadequate

Therefore, the general situation about the teaching materials was that they were inadequate in quantity.

In relation to item 4 on the quality of the teaching materials and facilities in their schools, the headmasters' views were as follows:

60% said materials were relevant and suitable
40% said materials were lightly relevant and suitable
0% said - very relevant and suitable
0% said - irrelevant and unsuitable

The general indication on the quality of the few available teaching materials was therefore that they were relevant and suitable for teaching. From items 5, on the effect of the teaching materials and facilities on the candidates' performance in the "O" Level Agriculture examinations, the following was expressed.

20% said results were good
80% said results could have been better
0% said results were bad

"Could have been better" is another way of saying that the results were not up to to the expected standard or that they were not satisfactory. Along the same lines, the response to Item 7 regarding the standard of Agriculture compared to the more established subjects showed the following position:

60% said the performance was below that of the more established subjects
20% said it was the same
20% said it was above

So the trend of the responses is that the performance in Agriculture is not satisfactory and the teaching materials, although relevant and suitable, are inadequate. The trend of the response above is infact in agreement with the relative positions of Agriculture as shown in figure 1 and 2. Now can this unsatisfactory performance in Agriculture be attributed to the inadequate materials and facilities or to some

other factors also? Could these other factors be the quality and quantity of teachers; quality of school administration, the curriculum and the type of students?. On the issue of teaching materials, a survey carried out by the National Teachers College Kyambogo in 1981 regarding problems affecting the teaching of practical subjects (agriculture inclusive) in Uganda secondary schools, it also found out that one of the major problems was the general inadequacy of teaching materials and facilities.

(b) Teachers:

Regarding teachers, part of item 6 on what aspect of teachers also affects the teaching of Agriculture the responses were as follows:

11% said agriculture teachers were not enough

22% said Agriculture teachers never stay in their schools for long, that is there is great mobility or instability of Agriculture teachers.

Meanwhile, in item 8, on competence of the teachers, the trend was that

60% said teachers were very competent

40% said teachers were fairly competent

0% said teachers were incompetent

To item 11, regarding the morale of the of teachers, 83% of the respondents said the morale of the teachers was high but 17% said it was low. Also in normal circumstances excess teaching load tends to make teachers inefficient but a majority response of 80% indicated that the teachers were adequately loaded. Therefore according to this, morale is eliminated as a limiting factor.

So, the emerging problem about teachers is that although they are competent and have good morale, they do not stay in one school for long. Since they are competent, the teaching standard, hence examination performance should have been good but this competence is nullified by the high mobility or instability of teachers. Keep going away frequently and new ones coming in, there will be discontinuity and time lag in teaching. Consequently not enough subject matter will be covered for the examination purposes.

This finding about the mobility of teachers also agrees with the findings from the investigation carried out by the National Teachers College Kyambogo on the problems of teaching practical subjects in secondary schools in Uganda.

c. Administration:

From items 6, 25% of the responses indicated that schools or teachers of agriculture for that matter receive no advice or guidance from the Inspectorate. One of the tasks of the Inspectorate is to visit schools often to monitor the problems and progress of subjects and teaching in schools and to ensure that teachers are directed properly. Lack of this often leaves the average teacher without help and this may affect the quality of his output. The reflection of this will usually appear in form of diminished standard of student's performance

d. Agriculture Syllabus

In reference to the Agriculture syllabus, item 16 received 100% response to the effect that the syllabus contents are relevant to both students' and national needs. Naturally, people like to do things which have a bearing to their needs. This therefore implies that students have interest in the subject and hence take it seriously because they see a purpose in it. So the question of lack of interest from the students being one of the causes of poor examination results does not therefore arise. In any case, up until 1980, Agriculture was an optional subject. So students who opted for it were those with some level of interest in it. However, in Item 6, 38% of the responses indicated that the Agriculture syllabus is too wide to be covered in the time available, consequently affecting the performance of candidates. So far, according to the headmasters, the problems relating to the teaching of Agriculture are a wide syllabus, inadequacy of teachers and teacher mobility or instability. The effect of this has been insufficient teaching and hence poor examination results. This fact is confirmed by the responses to item 7 on examination. To Item7, the responses were as follows:

60% said Agriculture results were below other subjects

20% said they were the same as other subjects

20% said they were better than some subjects

0% said they were better than all subjects.

So, in majority of schools, Agriculture examination were below those of the more established subjects.

Responses to items 17 and 18 on the level of difficulty of examinations and their effects on performance indicated by 75% response that the questions are often difficult and that examination materials usually required are often difficult to get. In addition to this, 13% said that the instructions are often not clear.

Now from the preceding analysis, the emerging problems are as follows:

First, many schools do not have adequate teaching materials and facilities. This makes the teaching of agriculture difficult. Secondly, agriculture teachers are not enough. The third problem is that agriculture teachers are not stable and lastly that the agriculture syllabus is too wide to be covered in the time available.

2. Agriculture Teachers' questionnaire

This instrument was also designed to seek information on the quantity of teaching materials and facilities in schools; quality of teachers and school adminsitration, nature of the agriculture curriculum and the examination systems all in relation to the teaching of agriculture in secondary schools.

a. Teaching materials and facilities

With respect to this issue, item 9 (a) required the teachers to assess the quantity of the materials in their respective schools by indicating whether it is good, average or poor. The responses were as follows:

53% said the materials were poor (inadequate)
35% said average
12% said good

In item 12 which sought to find out the effect of the teaching materials and facilities on the candidates' performance the following responses were obtained:

0% said due to good teaching facilities, teaching was also good and examinations results were good.
81% said poor (inadequate) facilities hence poor teaching and usually poor examination results
19% said examination results are usually mediocre due to fairly adequate teaching facilities

So far, the view of the Agriculture teachers agrees with that of the headmasters, that due to inadequate teaching materials, examination results in Agriculture are usually relatively poor.

(b) Teachers

Item I sought to establish the qualification of the Agriculture teachers in secondary schools. The inquiry revealed that:

65% were Grade V teachers*
24% were Graduate teachers
11% were below the above

Grade V teachers are all trained teachers. But for others, item 2 2 showed that:

17% of the graduate teachers were trained
6% were not trained

For below Grade V and Graduate levels, the situation was as follows:

6% were trained city and Guilds holders
6% were unqualified and untrained

Therefore 88% of the teachers were qualified, trained teachers.

* Grade V Teachers: Holders of Diploma in Education after a 2 - year training National Teachers College, Kyambogo.

Through experience, it has been seen and evidence exists to the effect that teachers who have professional training are generally better and hence are generally more effective teachers than those who have not received any professional training. Now the above analysis has revealed that a greater majority (88%) of the Agriculture teachers are trained. This therefore eliminates the quality of teachers as a significant factor contributing to poor examination results in Agriculture and confirms the headmasters view that the teachers are competent except in a few isolated cases.

Regarding the experience of the teachers as secondary school teachers items 3 revealed that of the total of the teacher respondents, the proportions under the respective levels of experience were as follows:

1 - 3 years	47%
4 - 7 years	35%
8 - 10 years	6%
Over 10 years	12%

This indicated a majority of the Agriculture teachers in secondary schools had taught for 1 - 3 years only. From personal knowledge of some of them in this group, some had actually taught for less than one year. It is an established fact that experience in one's job contributes to increased efficiency and effectieness in the job. "Practice makes perfect"is the common saying. It can therefore be stated that since a majority of the Agriculutre teachers did not have lo long teaching experience, their output, efficiency and effectiveness would be relatively low. At this point an observation can be made. There has been constant production of teachers and so more long service teachers should have been expected but fewer than expected are there. The question therefore is where have the others gone or what has happened to them? The more obvious implication here is there is teacher drop out. Items that follow try to seek explanations to this issue.

From Item 4, which sought reasons why those who joined teaching did join teaching, the responses were as follows:

52% said because they had genuine interest in teaching
24% said as a stepping stone to higher education
24% said as a last resort due to lack of good alternatives.

Interest plays a great role in the way we perform our duties. The greater the interest, the harder we work and often the better the output. So with a higher percentage of teachers having joined teaching due to interest, there should have been minimum mobility or instability of teachers. Also 24% said that they joined teaching as a stepping stone to higher education. This means that, they plan to leave teaching to pursue higher education. Even among those who said they joined teaching due to a genuine interest there is a probability that some would seek opportunity for higher education. This provides one casue for teacher mobility.

Now Item 5 sought to determine the level of interest of the teachers. The responses indicated that

41% had much interest
59% had little interest
0% had no interst

A significantly high percentage had little interest in teaching, Why? A closer examination of the responses to items 4 and 5 above reveals that some of those who joined teaching with interest, lost it. What explanation can be offered for this? Item 6 sough reasons for this little or loss of interest. The responses were as follows:

45% due to low pay in teaching compared to other professions
16% no promotions assured in teaching
16% teaching has no status or prestige
11% apparent lack of attention to and recognition of the teachers services.

6% poor housing in schools
6% poor school administration

So the above problems have contributed to little or loss of interst among a sizeable proportion of teachers. The major problem is the low pay in the teaching profession compared to o other professions. The above problems in general and the low pay in particular have caused teachers to leave the profession for other more satisfying jobs or to go to neighbouring countries, especially to Kenya. This terefore provides another outlet for teacher mobility or instability. Kalinda C (1980, Page 9) also agrees with this. In his discussion of means of improving the examination system; he also pointed out that the mobility of teachers is due to various factors
such as frustrations by or disatisfaction with the conditions of service, the desire to and opportunity for taking up a better job, going for studies and most of all the employer's policy of transfer. Dioh, S N (unpublished, Page 6) also observes that teachers of secondary and primary sectors of eduction are not entitled to certain fringe benefits which their university counterparts get. The above reasons therefore give explanation for high teacher mobility.

From item 7, 76% of the teachers assessed their confidence as high. This agrees with the headmasters' assessment. Confidence is therefore not a significant factor contributing to poor teaching and the comparatively low performance in Agriculture.

Again Item 16, revealed that a large proportion of the teachers had been to their respective schools for 4 years and below. The responses were as follows:

Upto 4 years	72%
5 - 6 years	17%
Over 6 years	11%

This also tends to indicate that teachers do not seem to stay in one particular school for long, hence affecting the continuity of teaching. Meanwhile, from item 17, it was deduced that 71% of the trained teachers taught in the critical classes of S3 and S4. There was therefore no teacher disposition. But it was seen from item 3 above that 47% of the trained teachers had a little experience of 1 - 3 years as secondary school teachers. This coupled with teacher instability, would make the teaching of these classes discontinous and ineffective.

In summary therefore, the preceding analysis of the teachers' responses reveals that mobility and short teaching experiences of agriculture teachers are also associate factors that affect the effective teaching of Agriculture.

(c) School Administration and Organization

The teachers' responses to item 9 (b) were as follows:

82% said average and above
18% said poor

The quality of school administration and organistion was therefore not a significant factor in the poor performance of candidates in Agriculture.

(d) Agriculture Syllabus

In relation to the coverage of the syllabus, responses to item 9(c) were as follows:

18% said good
53% said average
29% said poor

Now average people often hang on the fence. Since "good" is only 18%, "average" can be weighted towards "poor" so that "poor" becomes 82%. Generally therefore the coverage of the syllabus is poor.

Item 11 sought to establish the effect of poor syllabus coverage of examiantion performance. The responses were as follows:

75% said poor syllabus coverage contributed to poor examination results

25% said it did not

It therefore follows that because the syllabus is too wide, for the time available, coverage is poor and the result was poor performance of candidates in the final examinations. This was an inevitable consequence because the examining body sets papers irrespective of whether the syllabus has been covered or not.

In item 14, Agriculture teachers were asked to indicate whether the contact hours for Agriculture were enough or not. The response was as follows:

41% said they were not enough

59% said the hours were adequate.

But from the preceeding analysis, it was seen that the syllabus was too wide for the time available, and yet here the teachers have again said the contact hours are adequate. How then could the contact hours be adequate and at the same time the syllabus is too wide for the time available? It is therefore most likely that the teachers who said time for Agriculture is inadequate, said so from the point of view of their teaching loads.

(e) Examinations

With reference to examinations, responses to item 12 werer as follows:

81% said results were poor due to inadequate facilities and materials

19% said results were mediocre due to inadequate facilities and materials

This agrees with the view of the headmasters. On whether the school administration and organisation has any effect on the performance of candidates, 65% of the respondents said that the headmasters encouraged the teachers and the students to work hard and that the headmasters were interested in providing

the teaching materials and facilities but these were not avialable or were very costly. This also confirms the response to item 9(b) that the school administration and organisation was good.

From this analysis of teachers' responses, the following have emerged as problems affecting the teaching of Agriculture in secondary schools. The first one is that teaching materials and facilities are generally inadequate. Secondly, there is high teacher mobility or instability due to a number o reasons. The third problem is that the Agriculture syllabus is too wide for the rime available. The other is that a large proportion of teachers have short experiences as teachers and hence their perfomance is yet to improve and yet most of them teach the critical classes of S3 and S4.

3. The S4 Agriculture Students Questionnaires

The students were also required to give their views regarding teaching materials and facilities, quality of their agriculture teachers, quality of their school administration a and organisation, agriculture curriculum and the examination system.

(a) Materials and Facilities

From the responses to item 2 on the degree of difficulty of subject areas in Agriculture, it came out clearly that students found Agricultureal economics, Farm machinery and Engineering, and farm practicals generally difficult. In Item 3 they gave reasons who they found certain subject areas difficult and the responses were as follows:

88% responses indicated that the above subject areas were difficult because textbooks are not available other teaching/learning materials are not available and very little or no practical work is done. All the ten (10) schools faced the problems of material supply and utilisation.

The headmasters, Agriculture teachers and the S4 Agriculture students all have a common view that the inadequacy of teaching materials and facilities is a problem.

(b) Teachers

To item I on the standanrd of Agriculture teachers, the students responses were as follows:

9% said excellent
55% said good
33% said average
2% said poor
2% said very poor

From this, it can therefore be said that the teachers generally could teach well. The students' response to item 3C also agrees with the view that teachers could teach well. The headmasters also said that the teachers were competent. Also from the students' response to item 10 on the teachers personal attributes, 90% said that the teachers were inspiring, sympathetic and really to solve problems. This therefore eliminates this professional aspect of the teachers from being a factor in the poor teaching of Agriculture.

Responses to item 4 on how often the teachers corrected the students' notebooks, indicated the following situation:

60% said note books were not corrected at all
30% said at the end of every topic
10% said once a term

This showed that many teachers do not correct the notebooks of their students. In a system where students are guided to make their own notes, and where textbooks are not adequate or available, it is important for the teacher to read the students' notes so as to correct factual errors. Neglect of this aspect of formative evaluation means denying students vital and curical help. Formative evaluation is a vital aspect of teaching that cannot be dispensed of with.

Analysis of item 12 showed that 70% of the schools had Grade V teachers and in responses to item 13 in 75% of the schools where there were both grade V and graduate teachers, the students were of the opinion that graduate teachers teach better than grade V teachers or any other type of teachers below those. But in 25% of the cases the students were in favour of the Grade V teachers. However the number of schools with both Grade V and Graduate teachers was too small to offer any conclusive evidence on this issue.

Analysis of Item 14 revealed that

40% of the schools had male teachers only
10% of the schools had women teachers only
50% of the schools had both male and women Agricultural teachers.

On the comparative efficiency of the male and women Agricultural teachers, in responses to item 15, 80% of the respondents said that male teachers teach better than female teachers. This difference in efficiency between male and women teachers of Agriculture could therefore also be responsible for the low performance in Agriculture in schools where women Agriculture teachers are found. The point will however require further and more independent investigation to establish the consistency of view.

The students overall view of the teachers is therefore that the teachers teach well but many do not correct students' notebooks. They also said that male teachers teach better than women teachers.

(c) School Administration:

Students' responses to item 8 on the quality of school adminstration on the interest and performance, students' response was as follows:

54% said the adrministation was good and above
16% said it was bad and very bad

But to item 9 on the effect of school administration on the interest and performance, students response was as follows:

50% said bad administration lowered students interest and morale of teachers and that school resources were poorly used, thus causing poor teaching and reduced student interest.

40% were positive about the administration
10% had no opinion

Now a closer examination of these responses to items 8 and 9 above, reveals that the responses to the two items are contradictory. The basis of this contraction could be that some students answered item 9 theoritically but not from the real situation obtaining in their respective schools. It was therefore difficult to deduce any logical conclusion on the effect of administration.

(d) Agriculture Curriculum

In item 2, the students were required to indicate which subject areas they found difficult or easy to understand. For each of the subject areas, the majority responses were as follows:

(i) soil science - easy by 60%
(ii) Crop production - easy by 80%
(iii) Animal husbandry - easy by 70%
(iv) Agricultural economics - difficult by 80%
(v) Farm machinery - difficult by 90%
(vi) Farm practicals - difficult by 70%
(vii) Principles of Agriculture - easy by 70%

A majority of students therefore find Agricultural economics, farm machinery and farm practicals difficult areas in agriculture This could be explained by the fact that agricultural economics o in general is an abstract subject, requiring imagination to understand it. In addition to this, there are no books. It is therefore no surprise that students find difficulty to understand it. Agricultural mechanics and engineering too required a good d deal of teaching aids to facilitate understanding. But inadequac unavailability of teaching materials has already been expressed

as one of the major problems affecting the teaching of agriculture. For farm practicals, students have been known to dislike physical involvement on the farm and regard it as dirty. However, the areas they found easy are the areas for which some of the teaching materials can be found naturally.

So, as the responses to Item 3 indicate, the major problem contributing to the difficulty of certain areas in agriculture is lack of or inadequacy, of teaching/learning materials like textbooks, tools and equipments charts and other relevant teaching aids.

Now since examinations are set regardless of which areas the students find difficult, it is therefore not surprising to find that examinations are generally difficult. This is supported by the students' response to item 17 in which 76% of the responses indicated that agriculture examinations were generally difficult or very difficult.

Furthermore responses to item 3(a) did not show that students had no interest in agriculture. In any case, up until 1980, agriculutre was treated as an optional subject. So mostly those students who were interested in it opted for it. So the explanation to the difficulty of some of the areas does not therefore lie in the students' lack of interest. After all 61% response to item 11 said that the teachers good personal attributes increased the students' interest and motivation in agriculture. But sometimes a difficult thing kills the original interest in it. It is therefore possible for the students to have lost interest in those difficult areas in agriculture.

In summary however, the major problem from the students' point of view is the lack of or inadequacy of technical learning materials.

(iii) Method of Data Analysis

Data analysis was done personally. The questionnaires were basically designed to seek information on teaching materials and facilities, agriculture teachers quality of school administration, agriculture syllabus and the examination system.

The analysis of each questionnaire was carried out by first obtaining the responses to each item by tallying. The responses so obtained were then expressed in percentage form. Using these percentages, items that sought information on the same issue were compared to see whether there was agreement or consistency in response between such items. Emerging trends were thus established on the basis of majority responses and consistency.

The chapter which follows therefore discusses the findings in this study as deduced from the preceeding analysis of the data and information collected.

C H A P T E R F O U R

F I N D I N G S

The survey aimed at finding out the situation regarding the quantity and quality of teaching materials and facilities; numbers and quality of agriculture teachers; quality of school administration and organisation; agriculture curriculum and the examination system all in relation to the standard of students performance in agriculture examinations in secondary schools. From the three groups of subjects or respondents; the findings about the above issues were as given below:

1. Teaching Materials and Facilities

The majority of the headmasters in the sample said that the teaching materials and facilities were inadequate but the little available was relevant and suitable for teaching purposes. The agriculture teachers also indicated that materials and facilities were inadequate and that this inadequacy caused ineffective instruction of the subject and consequently contributed to poor performance of candidates in the final agriculture examinations. Similarly, the response of the S4 agriculture students revealed that textbooks, and other materials were either inadequate or not available at all.

Therefore, from the responses of the three groups, it can be deduced that teaching materials and facilities were a problem. They were either inadequate or not available at all and this caused ineffective instruction of agriculture and consequently contributed to the comparatively poor performance of candidates in agriculture examinations. This agrees with Standa E M (1975, Page 113) when he states that schools which have better resources perform better than those which do not have similar facilities. Also in a survey carried out by the National Teachers' College Kyambogo to find out problems affecting the teaching of practical subjects in secondary schools,

it was also found out that inadequacy or lack of teaching materials and facilities was one of the crucial problems for agriculture too.

2. Teachers

From their responses the general view of the headmasters in the sample was that agriculture teachers were competent and their level of morale was good. But the problem was that they never stayed in schools for long and in addition some of the headmasters expressed that teachers were not enough. Meanwhile, responses from the teachers themselves revealed that a majority of agriculture teachers (88%) were trained and out of these, a greater number (65%) were Grade V teachers. A larger number of those who taught in the critical classes of S3 and S.4 were qualified and so there was no staff dispositioning or misplacement. However, not many of them had gained sufficiently long experience as teachers and this was coupled with mobility.

Now, mobility of the teachers was caused by one or more of the following factors in their descending order of importance. First, it was caused by the low pay in teaching profession compared to other professions. Secondly, it was also due to teaching having no status or prestige and no assurance of promotions. Thirdly, it was also due to apparent lack of attention to and recognition of teachers efforts. The fourth point is the poor housing in schools and lastly poor school administration.

From the responses of the teachers, 52% of them stated that they joined, teaching because they had genuine interest in teaching. But despite this interest, there was high teacher mobility or instability. This can be explained by the fact that the above factors caused even the interested and good teachers to leave teaching in search of good pay and status in either other professions or in the neighbouring countries. Highest G (1951, Page 9) also agrees that a teacher's chief difficulty is poverty.

He belongs to a badly paid profession. He cannot dress and live like a workman. Kalinda C (1980, Page 9) also cited that the mobility of teachers is due to factors such as frustration by or dissatisfaction with with the conditions of service, the desire to and opportunity for taking up a better job, going for further studies.

Students' responses indicated that the teaching standard of the teachers was generally good and that the teachers were inspiring, sympathetic and ready to solve problems. This according to the students', increased their motivation and interest in the subject. This reflects the view of Highest G (1951, Page 17), that one of the essentials of good teaching is for a teachdr to like his students. Now the learning atmosphere between the teachers and the students was therefore not a hinderance to the students' learning. However, many of the teachers did not correct the note books of their students at all. This aspect of formative evaluation was therefore not generally given emphasis.

Now in 50% of the sampled schools, there were both men and women agriculture teachers. Through their experience, the majority of students believed that male teachers were better than the women teachers. This point will however require a further and widér, more independent investigation to establish the consistency of the view.

In summary therefore, the main findings about the agriculture teachers were that:

(a) They were competent
(b) Many were trained
(c) Teachers were not quite enough
(d) They were unsuitable due to the reasons given above
(e) Because of the instability, most teachers were the newly qualified ones with relatively short teaching experience.

3. Administration

Lack of and guidance to the teachers of agriculture by the inspectorate was given by the headmasters as one of the problems affecting the teaching of agriculture in secondary schools.

The view of a majority (54%) of the students was that the school administation was good. But again in response to the effect of school administration to teaching and their performance, a majority (50%) said that bad administration affected the teaching of agriculture. This contraction can be attributed to the fact that students answered item 9 from a theoritical point of view rather than from the concrete situation existing in their schools. It was therefore difficult to deduce any logical conclusion from these responses about the effect of school administration on the teaching of agriculture and students' performance.

However, a majority (82%) of the agriculture teachers in the sample were of the view that school administration was generally average and above. This therefore was not a significant factor in the poor performance of candidates in agriculture.

Nevertheless, there is still a necessity to conduct another investigation to establish the relationship between school administration and students' performance in agriculture.

4. Agriculture Curriculum

The majority (100%) view of the headmasters was that the Agriculture curriculum was relevant to the students' and national needs but it was too wide to be covered in the available time.

The response (53%) of the agriculture teachers also agreed that the syllabus was too wide to be covered in the allocated time and this consequently contributed to the relatively poor performance of candidates.

in agriculture "O" level examinations.

The students' point of view was that they found it difficult to understand certain areas in agriculture namely agricultural economics, agricultural mechanics and engineering and farm practicals. This was due to lack or inadequacy of teaching/learning materials and facilities.

The main issues about the curriculum were therefore that it was too wide to be covered in the time available and that some areas of the subject were difficult for the students. This was basically because of lack of the necessary teaching materials.

5. Examination System

Regarding examinations, the headmasters expressed the view that examination results of agriculture were below those of the more established subjects. They attributed this to yet another factor. They thought that questions were often generally difficult and that it was often difficult to get materials required for practicals in the examination.

Agriculture teachers were also of the opinion that examinations were often difficult. The difficulty was due to the fact that teaching could not be accomplished properly due to lack of materials and facilities.

The majority (76%) view of the students was also that Agriculture examinations were often generally difficult. Let us now turn to the conclusions drawn from this study and the recommendations suggested.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

I. CONCLUSIONS

From the preceding findings, it is clear that the factors which militate against the effective teaching of agriculture in Uganda secondary schools are as follows:

1. Teaching Materials and Facilities

Teaching materials and facilities are inadequate. In some cases, certain materials and facilities are actually not available. For example textbooks, tools and equipment are not adequate and in some cases they are not available Under this condition of scarcity, it was, and still, is not possible to teach certain areas of agriculture well. The efficiency and effectiveness of instruction is thus limited by this inadequacy or absence of the necessary instructional materials and facilities. The consequence is therefore reflected in the relatively poor performance of candidates in the "O" level agriculture examinations.

2. Teachers

According to the findings, the majority of teachers were trained, competent and had good personal attributes. However, the major problems about the teachers were that they were unstable or mobile. This instability was due to several factors, the foremost being the low pay in the teaching profession compared to other professions. The second is the lack of prestige or status in teaching. Thirdly is the lack of assurance of promotions in teaching. The other factors include the apparent lack of attention to and recognition of teachers' efforts, poor school housing and poor school [illegible] These factors presented in their descending order of importance are the cause of teacher instability.

The effect of teacher instability is discontinuity and lag in the teaching of the subject. The students thus end up being inadequately prepared for the final examinations and the consequence of this is poor examination results.

The second problem about the teachers was that they were not enough. This could be a direct consequence of teacher instability. Inadequacy of teachers also leads to insufficient coverage of the syllabus, resulting in unsatisfactory examination results.

The last problem about the agriculture teachers is that according to the findings a large proportion of the teachers had not gained much experience as teachers. Since in several cases the critical classes of S.3 and S.4 were being taught by this group of teachers, their professional output was not high enough to produce satisfactory examination results.

3. Administration

The issue that emerged about administration was that Inspectorate does not offer sufficient pieces of advice and guidance to the teachers of agriculture. That advice and guidance would particularly be of great help for the orientation of the newly qualified teachers.

4. Agriculture Curriculum

The fourth factor that emerged out as a problem in the teaching of agriculture is the wide syllabus. The syllabus is too wide to be covered sufficiently well in the allocated time. So teaching a wide syllabus under the circumstances of inadequacy of both teaching materials and facilities, and teachers is a straining task. Now since the examining body sets questions irrespective of whether the syllabus has been covered or not, chances would be that candidates often find questions on areas they have not covered, difficult and the net result is the unsatisfactory examination results.

So, the immediate reflection of the effects of the above factors was in the comparatively lower standard of performance by candidates in agriculture examinations.

II. RECOMMENDATIONS

The main objective of this survey was to determine the factors or problems that tend to hinder the effective implementation of agriculture curricuoum in Uganda's secondary schools. To this effect, findings from the survey revealed four (4) major issues as problems that affect the teaching of agriculture. These problems include shortage or absence of teaching materials and facilities; Teacher instability, shortage and lack of long teaching experience; administration; and wide agriculture curriculum.

Therefore in an effort to solve or alleviate the above problems, the following recommendations are made:

Realising the shortage or absence of the teaching/learning materials and facilities, and the consequence of this on the teaching of agriculture, it is therefore recommended that:

(a) The National Agriculture Subject Panel of the National Curriculum Development Centre (N C D C) should intesify its efforts in book-writing and produce agriculture textbooks for the schools and colleges also. Since the National Curriculum Development Centre has a printing press, the printing would be relatively easier and cheaper. This would significantly reduce the problem of importing books.

(b) The Ministry of Education should put in more effort and make strategies to solve the problem facing the Education and Science Equipment Production Unit (ESEPU), which it started, so as to enable it to enable the Unit to start production.

In the longrun, this would significantly reduce the problem of teaching materials for Science subjects including agriculture.

(c) The teachers of agriculture should be urged and encouraged to start demonstration plots from which students will also learn.

(d) The Ministry of Education should also be requested to grant more financial assistance to the Visual Aids Centre in Makerere University so as to enable it to produce teaching materials like slides and charts for schools to buy.

(e) Headmasters of secondary schools should also be requested to give special consideration to agriculture students in their respective schools so that they can use the school lorry or bus whenever necessary to visit the easily accessib places of agricultural intererst. In this way studetns will be able to see what may not on the school farm.

(f) Agriculture teachers should further be encouraged to improvise by using the locally available materials for making some of the required teaching materials.

Noting that teacher instability is high and that this instability is caused by a number of factors already outlined above (Page 65, 66), the following suggestions or lines of action are given so as to raise the teachers social and material welfare and to give them a status.

(a) The government should raise the salaries of teachers to levels comparable with those offered by other employment and productive sectors. This will reduce teacher instability.

(b) Teachers should also be allowed more attractive material fringe benefits. For example these may include giving every teacher the benefit of free primary education to utmost two of his children. Again since food expenses also claim a sizeable fraction of the teachers' meager income, the Government should allow schools to sell food stuffs to their teaching staff at subsidised rates. It is presumed that this would enable teachers to make some savings which they would use elsewhere to raise their standard of living and hence status.

(c) The Government should also consider setting up a promotional structure within the teaching profession; apart from the conventional ones of headmaster and deputy headmaster. The suggested promotional levels would for example be (i) Teacher (ii) Senior teacher, with a salary but not just allowance attached to each of the designations. A newly qualified teacher would be designated as "Teacher" After a given period of service, and with good record of work, he would be promoted to "Senior teacher". Headmasters and deputy headmasters will remain above these designations.

This agreement in the researcher's opinion, will also reduce teacher instability because there would be something higher for them to expect or hope for.

(d) As for housing, the Government, through the Ministry of Works should workout housing construction programme for schools. The assistance of some International Agencies should also be solicited for putting up houses in such schools where the housing problem is more acute.

Apart from reducing teacher instability the above lines of action will also attract persons with higher academic calibre to join teaching.

It was also noted that Agriculture teachers are not enough. This shortage is even going to become more acute now that Agriculture is a compulsory subject in secondary schools and for all students.

The level of shortage can be reduced by:

(a) Adopting measures as suggested above, that reduce teacher instability.

(b) Increasing the intake of Agriculture teacher trainees at the National TEachers' College Kyambogo. At the moment, the maximum number of teacher trainees the college can take for Agriculture is 25, due to lack of teaching space and other facilities. So increasing the intake can be possible if the presently uncompleted agriculture laboratory complex at the National Teachers College is completed and the necessary training equipment brought in.

The survey also revealed that a larger proportion of the Agriculture teachers had not gained much experience as teachers. This was a direct consequence of instability of teachers. The number of experienced teachers can therefore only progressively build up over a number of years by adopting measures that will reduce teacher instability or drop-out.

Another problem was that the Inspectorate does not offer sufficient guidance and advice to the agriculture teachers in secondary schools. Realising the importance of professional advice and guidance, the Inspectorate should try to give more advice and guidance to Agriculture teachers.

It was also noted that Agriculture syllabus is too wide to be covered in the time allocated. Now bearing in mind the relevance of this curriculum to the needs of the students as persons and those of the Nation at large, it may not be advisable to reduce the length of the syllabus but the following approaches could be adopted.

(a) The teaching could be re-organised and co-ordinated such that areas of Agriculture that appear in such subjects like Geography and Biology would be left to be covered in these subjects. For example, soil formation and the process of weathering could be left to Geography. This would leave time for other areas in Agriculture.

(b) Agriculture should be allowed more lessons or hours on the school time-table, say 6 periods per class per week. These additional lessons would be chopped off from subjects like English language and literature which have a larger number of lessons per week per class while Agriculture has mostly three lessons.

However, some of the solutions suggested above in relation to teachers are not limited to Agriculture teachers only. They embrace teachers in general because low pay, status and other issues are issues which pertain to teachers as a whole. In any case it would be unfair to offer certain facilities to Agriculture teachers only leaving when teachers who need them as well.

In conclusion therefore it is hoped that an integrated application of the above suggested recommendations will solve the problems affecting proper teaching of Agriculture in Uganda and hence the standard of examination results.

UNRESOLVED ISSUES FOR FURTHER RESEARCH

In the light of the diversity of factors involved in the teaching/learning process, and the diversity of the objectives for teaching agriculture, the following issues are suggested for further research.

1. The comparative effectiveness and efficiency of male and women teachers should be undertaken. Such a study will seek to establish whether there is any differences in the teaching efficiency and effectiveness between male and women agriculture teachers.

2. To find out the extent to which the objectives of teaching agriculture have been achieved. This will provide feedback on whether the programme is achieving anything or not.

3. To find out whether there is any significance difference between Agriculture examination results of schools near towns and those which are fairly more rural.

4. To establish whether there is a difference in achievement in agriculture examinations between

   (a) Boys and girsls in the same school

   (b) Girls' and boys' schools

   (c) Boarding and Day schools

and the reasons behind such a difference if there will be any.

APPENDIX I

You are requested to answer the questions in this questionnaire accurately. DO not give your name. Answer questions accurately by putting a tick ( ) against the appropriate statements.

Your answers will be kept confidential.

Name of School .....

1. Year teaching of Agriculture started in this school _____

   _____

2. Number of Agriculture teachers here _____

   _____

3. In terms of quantitty, would you say generally that teaching materials for Agriculture in your school are ( )

   (a) Adequate ( )

   (b) Inadequate ( )

   (c) Not available at all ( )

4. How would you rate the available materials in terms of the relevance and suitability for teaching?

   (a) Very relevant and suitable ( )

   (b) Relevant and suitable ( )

   (c) Slightly relevant and suitable ( )

   (d) Irrelevant and unsuitable ( )

Put a tick ( ) against one statement of your choice

5. How does the above situation of teaching materials affect the "O" Level Examination performance of candidates in your school?

(a) Notwithstanding students do well ( )

(b) Students perform badly ( )

(c) Candidates could have done better ( )

6. Which one(s) of the following other problems affect the teaching of agriculture and performance of candidatesin your school.

(a) Agriculture teachers are not enough ( )

(b) The Syllabus is too wide ( )

(c) Inspectorate gives no advice and guidance to the teachers ( )

(d) Agriculture teachers never stay in my school for long ( )

7. Compared to other more established subjects in your school, what would you day the exam performance of candidates in agriculture in your school is

(a) Better than all those subjects ( )

(b) Better than some of those subjects ( )

(c) Same as those subjects ( )

(d) Below those subjects ( )

8. Give a general assessment of competence of your Agriculture teachers

(a) Very competent ( )

(b) Fairly competent ( )

(c) Incompetent ( )

9. If your assessment is (b) or (c) above, what is/are the main reason(s)

(a) Lack(s) command of subject matter ( )

(b) Lack(s) command of methodology of teaching the subject ( )

(c) Cannot organise practicals well ( )

(d) All the above ( )

10. (i) Would you ascribe the above defects to the teacher's training?

YES ( ) NO ( )

(ii) If NO, then to which of these causes

(a) The teacher(s) appear(s) to be naturally incompetent incompetent ( )

(b) Lack of interest in the teaching of the subject by the teacher(s). ( )

N.B. You can give your own opinion ;

11. How would you assess the morale of your teachers:

(a) High ( )

(b) Average ( )

(c) Low ( )

12. Whatis/are the cause(S) of the above level of morale among your teachers of Agriculture?

(a) School housing ( )

(i) Good ( )

(ii) Fairly Good ( )

(iii) Poor ( )

(b) Students are ( )

(i) Very interested and cooperative ( )

(ii) Fairly interested and fairly cooperative ( )

(iii) Uninterested and un-coperative ( )

(c) Relationship with school administration ( )

(i) Very good ( )

(ii) Good ( )

(iii) Bad ( )

(iv) Very bad ( )

(d) I give them other human treatment

(State if you do give) ( )

13. How would you describe the load of your agriculture teachers

(a) Highly overloaded (....(Hrs/Week) ( )

(b) Overloaded (....(Hrs/Week) ( )

(c) Adequately loaded (....(hrs/Week) ( )

(d) Underloaded (....(Hrs/Week) ( )

Tick ( ) against one appropriate statement and give the average number of hours per week.

14. How does the above load affect the efficiency of the teacher(s) ( )

(a) Makes them very inefficient ( )

(b) Makes them slightly inefficient ( )

(c) Makes them very efficient ( )

(d) Makes them just efficient ( )

(e) No effect on efficiency ( )

Tick one applicable statement

15. How many more Agriculture teachers would you need in respect to No. 14 above.

(a) 1 more ( )

(b) 2 more ( )

(c) 3 more ( )

(d) 4 more ( )

(e) None ( )

16. What is your assessment of the relevance of the agriculture curriculum to students and national agriculture needs

(a) Very relevant ( )

(b) Relevant ( )

(c) Slightly relevant ( )

(d) Irrelevant ( )

17. What is your opinion about the "O" level Agriculture examination

(a) Questions are often too difficult ( )

(b) Questions are often difficult ( )

(c) Questions are often too easy ( )

(d) Questions are often easy ( )

(e) Instructions are often not clear ( )

(f) Questions set often require materials and specimens which are difficult to get ( )

Tick the statements that you find appropriate

18. How has the above affected the candidates perfomance in Agriculture examinations in your school

(a) Most students don't pass well ( )

(b) Most students pass well ( )

(c) Most students get average passes ( )

(d) No effect on candidates performance ( )

QUESTIONNAIRE FOR TEACHERS OF AGRICULTURE IN SECONDARY SCHOOLS

You are requested to answer the questions in this questionnaire honestly and accurately. Do not give your name. Answer each question by putting a tick ( ) in the appropriate column and/or against the appropriate statement.

SECTION I:

Name of School .....

(a) N T C Kyambogo ( )

(b) Any other place give name ( )

(c) Makerere University or ( )

2. Your qualifications

(a) Degree in Agric and Dip+Ed. ( )

(b) Grade v Dip in Education ( )

(c) Degree but no training as a teacher ( )

(d) Diploma in Agric. with training as a teacher ( )

(e) Diploma in agric. with no training as a teacher ( )

(f) Any other (state it) ( )

3. Number of years as a teacher of Agriculture in secondary school.

(a) 1 - 3 years ( )

(b) 4 - 7 years ( )

(c) 8 - 10 years ( )

(d) Over 10 years ( )

SECTION II

4. You joined teaching

(a) Because you have a genuine interest in teaching ( )

(b) As a stepping stone to higher education ( )

(c) As a last resort due tolack of good alternatives ( )

5. How much interest do you have in teaching?

(a) Much interest ( )

(b) A little interest ( )

(c) No interest ( )

6. If (b) or (c) above, why? is it because of

(a) Low pay in teaching compared to other prefessions ( )

(b) Poor housing ( )

(c) Bad school adminstration ( )

(d) No one seems to notice and value your service as a teacher ( )

(e) No promotions assured in teaching ( )

(f) Teaching has no prestige ( )

SECTION III:

7. What is your level of confidence as a teacher?

(a) High ( )

(b) Low ( )

(c) None at all ( )

8. If (b) or (c) above, the reason(s) is/are because of

(a) Inadeqaute academic content due to inadequate training at college ( )

(b) Inadequate methodology due to inadequate training at college ( )

(c) Both of the above reasons ( )

(d) Lack of training as a teacher ( )

9. What is your assessment of the items listed below in your school?

	Good	Average	Poor	Other Comments
(a) Teaching facilities				
(b) School administration and Organisation				
(c) Coverage of syllabus				

N.B. "Teaching facilities refer to things like classrooms and labs, tools and equipment, audio-visual aids, a school farm etc.

10. If coverage of the syllabus is poor, which one of the followi reasons accounts for this:

(a) Teachers do not plan their work well ( )

(b) Students are slow in understanding ( )

(c) The syllabus is too wide for the time available ( )

(d) All the above ( )

11. Does poor coverage of the syllabus contribute to poor performance of the candidates in "O" level agriculture examinations in your school?

YES ☐ NO ☐

12. How do the facilities described in (a) above, affect the performance of candidates at the "O" level exams in Agriculture in your school?

(a) Due to good teaching facilities, teaching is good and exams results are good. ( )

(b) Due to poor teaching facilities, teaching is also poor hence exams results are usually poor ( )

(c) Examinations results are usually modiocre due to fairly adequate teaching facilties ( )

13. What effect does the administration described in Number 19 above have on the examination performance of candidates in Agriculture in your school?

(a) The Headmaster encourages the teaching of Agriculture and helps in and allows funds for search of teaching facilities, hence encouraging examination results. ( )

(b) The Headmaster pays little or no attention to Agriculture doesn't allow funds for necessary facilities hence poor teaching and thus poor exams results ( )

(c) The good administration discourages the teachers and students to work hard. ( )

(d) the bad administration discourages the teachers and students from working hard. ( )

14. Do you think the number of periods of hours given to Agriculture in your school is enough? State the average number of periods per week per class.....

YES ☐ NO ☐

15. If NO, how many hours per week/class would you consider to be enough?

(a) 4 hours ( )

(b) 6 hours ( )

(c) 8 hours ( )

(d) 10 hours ( )

(ii) In your choice above how would you allocate the hours to theory beyond practicals?

(a) Theory ( )

(b) Practicals ( )

SECTION IV:

16. For how long have you been to this school?

(a) Less than 2 years ( )

(b) 2 - 4 years ( )

(c) 5 - 6 years ( )

(d) Over 6 years ( )

17. Which of the following classes do you teach?

(a) S.I. ( )

(b) S.2. ( )

(c) S.1. and S.2. ( )

(d) S.4. ( )

(e) S.3. ( )

(f) S.3. and S.4. ( )

18. For how long have you been teaching these classes

(a) 1 - 2 years ( )

(b) 2 - 4 years ( )

(c) 5 - 6 years ( )

(d) 5 - 6 years ( )

(e) Over 6 years ( )

APPENDIX THREE

You are requested to answer questions in this questionnaire honestly and accurately. Do not give your name. Answer each question according to the instructions given.

Name of your school.....

1. Of the alternatives given below, which one describes best the teaching standard of your Agriculture teacher(s).

   Put a tick ( ) against what you think is the best description.

   (a) Excellent ( )

   (b) Good ( )

   (c) Average ( )

   (d) Poor ( )

   (e) Very poor ( )

2. For the Agriculture areas given below, indicate degree of your understanding for each of them by putting a tick ( ) in the appropriate column against the subject area(s)

(a) Social Science	
(b) Crop Production	
(c) Animal Husbandry	
(d) Agricultural Economics	

(e) Farm Machinery and Engineering

(f) Farm Practicals

(g) Principles of Agriculture

3. For the subject areas you find difficult or very difficult, you find them so because: (Put a tick ( )) against the reason which you identify to be the appropriate one:

(a) You are simply not interested in those subject areas ( )

(B) Yourr ability to understand is low ( )

(c) The teachers do /not teach well ( )

(d) Textbooks are not available ( )

(e) Textbooks are not enough ( )

(f) Other learning materials are not available ( )

(g) Very little practical work is done ( )

(h) No practical work is done ( )

4. How often does/do your teacher(s) correct your note books?

(a) After every lesson ( )

(b) At the end of every topic ( )

(c) Once a term ( )

(d) Not at all ( )

(e) Text books not enough ( )

(f) Other learning materials are not available ( )

(g) Very little practical work is done ( )

(h) No practical work is done ( )

4. How often does/do your teacher(s) correct your note books?

(a) After every lesson ( )

(b) At the end of every topic ( )

(c) Once a term ( )

(d) Not at all ( )

5. How often are you given tests? Put a tick ( ) in the appropriate box

(a) Once a term ( )

(b) Once a week ( )

(c) At the end of every topic ( )

(d) Not at all ( )

6. What is your opinion about the number of contact hours given to agriculture per week. Put a tick on the appropriate box.

(a) They are more than enough ( )

(b) Just enough ( )

(c) Not enough ( )

(d) I have no opinion ( )

7. If (c) above, how many hours per week would you consider to be enough per class?

(a) 4 hours ( )

(b) 6 hours ( )

(c) 8 hours ( )

(d) I have no opinion ( )

(e) 10 hours ( )

8. Would you say that the administration in your school is

(a) Very good ( )

(b) Good ( )

(c) Bad ( )

(d) Very bad ( )

Put a tick ( ) against one statement you think is the correct one.

(ii) Give reasons for your answer above.

9. How does the above quality of the administration affect your interest and performance in agriculture?

(a) Bad adminstration has resulted in low morale of teachers and low interest in students ( )

(b) Good administration has given teachers high morale, hence good teaching and interest in me ( )

(c) School resources are poorly used and hence poor teaching and low interest in me ( )

(d) School resources are properly used and hence good teachng and high interest in me ( )

(e) I have no opinion ( )

10. Would you say your teacher is

(a) Interesting and humorous ( )

(b) Dull and uninspiring ( )

(c) Inspiring ( )

(d) Harsh and unsypathetic ( )

(e) Sypathetic and ready to solve problems ( )

Put a tick against one statement you think is correct

11. How does no 10 above affect your interest and performance in Agriculture?

(a) Has increased my interest and motivation ( )

(b) Has caused me to lose interest and motivation ( )

(c) Has had no influence on my attitude, interest and performance in africulture ( )

12. What is the qualification of the teacher(s) who teach(es) you Agriculture

(a) Graduate teacher from University ( )

(b) Grade V teacher (from Kyambogo) ( )

(c) Have/has no teaching qualification ( )

13. If you have two or all the above types of agriculture teachers in your school, indicate which type teaches better or best

(a) Graduate teachers ( )

(b) Grade V teachers ( )

(c) Teachers with no teaching qualification ( )

14. Are your teachers of Agriculture

(a) Male ( )

(b) Female ( )

(c) We have both male and female Agriculture teachers ( )

15. What is your opinion of how they teach.

(a) Female teachers teach better than male teachers ( )

(b) Male teachers are better than female teachers ( )

(c) There is no difference between the female and male teachers ( )

16. If male and female Agriculture teachers are teaching you, or have taught you, indicate their qualification

	MALE	FEMALE
(a) Graduate teacher		
(b) Grade V teacher		
(c) No teaching qualification		

Put a tick in the appropriate box

17. What is your opinion about the examination system in Agriculture?

(a) Very difficult ( )

(b) Difficult ( )

(c) Easy ( )

(d) Very easy ( )

(e) Relevant to my needs ( )

(f) Irrelevant to my needs ( )

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